

485 490 495
 Asp Asp Ser Tyr Thr Cys Glu Cys Pro Arg Gly Phe His Gly Lys His
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 Cys Glu Lys Ala Arg Pro His Leu Cys Ser Ser Gly Pro Cys Arg Asn
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 Tyr Arg Phe Thr Gly Arg His Cys Glu Ile Gly Lys Pro Asp Ser Cys
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 Ala Ser Gly Pro Cys His Asn Gly Gly Thr Cys Phe His Tyr Ile Gly
 565 570 575
 Lys Tyr Lys Cys Asp Cys Pro Pro Gly Phe Ser Gly Arg His Cys Glu
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 Ile Ala Pro Ser Pro Cys Phe Arg Ser Pro Cys Val Asn Gly Gly Thr
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 Cys Glu Asp Arg Asp Thr Asp Phe Phe Cys His Cys Gln Ala Gly Tyr
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 625 630 635 640
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 Ala Leu Tyr Ala Cys Asp Arg Gly Tyr Ser Leu Ser Ala Pro Ser Arg
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<210> 5329
 <211> 2582
 <212> DNA
 <213> Homo sapiens

<400> 5329
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<210> 5330
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 <212> PRT
 <213> Homo sapiens

<400> 5330
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 Ala Leu Arg Lys Lys Glu Leu Asp Glu Glu Glu Ser Ile Arg Lys Lys
 35 40 45
 Ala Val Gln Phe Gly Thr Gly Glu Leu Cys Asp Ala Ile Ser Ala Val
 50 55 60
 Glu Glu Lys Val Ser Tyr Leu Arg Pro Leu Asp Phe Glu Glu Ala Arg
 65 70 75 80
 Glu Leu Phe Leu Leu Gly Gln His Tyr Val Phe Glu Ala Lys Glu Phe
 85 90 95
 Phe Gln Ile Asp Gly Tyr Val Thr Asp His Ile Glu Val Val Gln Asp
 100 105 110
 His Ser Ala Leu Phe Lys Val Leu Ala Phe Phe Glu Thr Asp Met Glu
 115 120 125
 Arg Arg Cys Lys Met His Lys Arg Arg Ile Ala Met Leu Glu Pro Leu
 130 135 140
 Thr Val Asp Leu Asn Pro Gln Tyr Tyr Leu Leu Val Asn Arg Gln Ile
 145 150 155 160
 Gln Phe Glu Ile Ala His Ala Tyr Tyr Asp Met Met Asp Leu Lys Val
 165 170 175
 Ala Ile Ala Asp Arg Leu Arg Asp Pro Asp Ser His Ile Val Lys Lys
 180 185 190
 Ile Asn Asn Leu Asn Lys Ser Ala Leu Lys Tyr Tyr Gln Leu Phe Leu
 195 200 205
 Asp Ser Leu Arg Asp Pro Asn Lys Val Phe Pro Glu His Ile Gly Glu
 210 215 220
 Asp Val Leu Arg Pro Ala Met Leu Ala Lys Phe Arg Val Ala Arg Leu
 225 230 235 240
 Tyr Gly Lys Ile Ile Thr Ala Asp Pro Lys Lys Glu Leu Glu Asn Leu
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 Ala Thr Ser Leu Glu His Tyr Lys Phe Ile Val Asp Tyr Cys Glu Lys

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His	Pro	Glu	Ala	Ala	Gln	Glu	Ile	Glu	Val	Glu	Leu	Glu	Leu	Ser	Lys
	275				280					285					
Glu	Met	Val	Ser	Leu	Leu	Pro	Thr	Lys	Met	Glu	Arg	Phe	Arg	Thr	Lys
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<210> 5331
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 <212> DNA
 <213> Homo sapiens

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<210> 5332
 <211> 61
 <212> PRT

<213> Homo sapiens

<400> 5332

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Lys	Gln	Lys	Arg	Ala	Asn	His	Arg	Glu	Arg	Asn	Lys	Thr	Arg	Gly	Lys
		20						25				30			
Met	Ile	Thr	Asp	Ser	Gly	Lys	Phe	Ser	Gly	Ser	Ser	Pro	Ala	Pro	Pro
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Ser	Gln	Pro	Gln	Gly	Leu	Ser	Tyr	Ala	Xaa	Gly	Arg	Gly			
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<210> 5333

<211> 883

<212> DNA

<213> Homo sapiens

<400> 5333

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<210> 5334

<211> 269

<212> PRT

<213> Homo sapiens

<400> 5334

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 Ile Gln Ala Arg Met Gly Val Phe Ala Gln Ala Asp Gly Ser Ala Tyr
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 Ile Glu Gln Gly Asn Thr Lys Ala Leu Ala Val Val Tyr Gly Pro His
 65 70 75 80
 Glu Ile Arg Gly Ser Arg Ala Arg Ala Leu Pro Asp Arg Ala Leu Val
 85 90 95
 Asn Cys Gln Tyr Ser Ser Ala Thr Phe Ser Thr Gly Glu Arg Lys Arg
 100 105 110
 Arg Pro His Gly Asp Arg Lys Ser Cys Glu Met Gly Leu Gln Leu Arg
 115 120 125
 Gln Thr Phe Glu Ala Ala Ile Leu Thr Gln Leu His Pro Arg Ser Gln
 130 135 140
 Ile Asp Ile Tyr Val Gln Val Leu Gln Ala Asp Gly Gly Thr Tyr Ala
 145 150 155 160
 Ala Cys Val Asn Ala Ala Thr Leu Ala Val Leu Asp Ala Gly Ile Pro
 165 170 175
 Met Arg Asp Phe Val Cys Ala Cys Ser Ala Gly Phe Val Asp Gly Thr
 180 185 190
 Ala Leu Ala Asp Leu Ser His Val Glu Glu Ala Ala Gly Gly Pro Gln
 195 200 205
 Leu Ala Leu Ala Leu Leu Pro Ala Ser Gly Gln Ile Ala Leu Leu Glu
 210 215 220
 Met Asp Ala Arg Leu His Glu Asp His Leu Glu Arg Val Leu Glu Ala
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<210> 5335

<211> 4282

<212> DNA

<213> Homo sapiens

<400> 5335

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<211> 766

<212> PRT

<213> Homo sapiens

<400> 5336

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Thr	Leu	Arg	Leu	His	Pro	Asp	Ile	Phe	Leu	Pro	Ser	Glu	Ile	Cys	Asp
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Arg	Leu	Val	Asn	Glu	Tyr	Val	Glu	Leu	Val	Asn	Ala	Ala	Cys	Asn	Phe
	50					55				60					
Glu	Pro	His	Glu	Ser	Phe	Phe	Ser	Leu	Phe	Ser	Asp	Pro	Arg	Ser	Thr
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Arg	Leu	Thr	Arg	Ile	His	Leu	Arg	Glu	Asp	Leu	Val	Gln	Asp	Gln	Asp
			85					90					95		
Leu	Glu	Ala	Ile	Arg	Lys	Gln	Asp	Leu	Val	Glu	Leu	Tyr	Leu	Thr	Asn
		100					105					110			
Cys	Glu	Lys	Leu	Ser	Ala	Lys	Ser	Leu	Gln	Thr	Leu	Arg	Ser	Phe	Ser
	115					120				125					
His	Thr	Leu	Val	Ser	Leu	Ser	Leu	Phe	Gly	Cys	Thr	Asn	Ile	Phe	Tyr
	130				135					140					
Glu	Glu	Glu	Asn	Pro	Gly	Gly	Cys	Glu	Asp	Glu	Tyr	Leu	Val	Asn	Pro
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Thr	Cys	Gln	Val	Leu	Val	Lys	Asp	Phe	Thr	Phe	Glu	Gly	Phe	Ser	Arg
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Leu	Arg	Phe	Leu	Asn	Leu	Gly	Arg	Met	Ile	Asp	Trp	Val	Pro	Val	Glu

4510

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Glu Glu Val Glu Glu Arg Met Trp Ala Ala Ile Gln Ser Trp Asp Ile		655
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	675	680
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<210> 5337

<211> 2742

<212> DNA

<213> Homo sapiens

<400> 5337

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<212> PRT

<213> Homo sapiens

<400> 5338

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His	Trp	Val	Pro	Val	Ser	Phe	Asn	Pro	Ser	Asp	Lys	Glu	Ile	Met	Thr
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<210> 5339

<211> 847

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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Leu	Leu	Ser	Gly	Asp	Glu	Tyr	Asn	Gln	Asp	Phe	Asp	Ser	Thr	Asn	Phe
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Glu	Glu	Ser	Gln	Asp	Glu	Asp	Asp	Ala	Leu	Asn	Glu	Ile	Val	Arg	Cys
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Cys	Leu	Cys	Trp	Gln	His	Ser	Val	Cys	Met	Gly	Leu	Leu	Glu	Glu	Ser
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Arg	Met	Cys	Gly	Leu	Ser	Phe	Phe	Lys	Glu	Asn	Tyr	Ser	His	Leu	Asn
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<212> DNA

<213> Homo sapiens

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<211> 690

<212> PRT

<213> Homo sapiens

<400> 5342

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			20					25					30		
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 Gly Glu Lys Leu Tyr Gln His Val Arg Ala Trp Leu Pro Ala Tyr Ala
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<212> DNA

<213> Homo sapiens

<400> 5343

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 35 40 45
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 65 70 75 80
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<210> 5345
 <211> 1912
 <212> DNA
 <213> Homo sapiens

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<211> 534

<212> PRT

<213> Homo sapiens

<400> 5346

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			20					25					30		
Ser	Val	Lys	Ala	Leu	Leu	Leu	Lys	Gly	Lys	Ala	Pro	Val	Asp	Pro	Glu
		35					40					45			
Cys	Thr	Ala	Lys	Val	Gly	Lys	Ala	His	Val	Tyr	Cys	Glu	Gly	Asn	Asp

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Lys Tyr Tyr Leu Ile Gln Leu Leu Glu Asp Asp Ala Gln Arg Asn Phe		80
	85	90
Ser Val Trp Met Arg Trp Gly Arg Val Gly Lys Met Gly Gln His Ser		95
	100	105
Leu Val Ala Cys Ser Gly Asn Leu Asn Lys Ala Lys Glu Ile Phe Gln		110
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Lys Lys Phe Leu Asp Lys Thr Lys Asn Asn Trp Glu Asp Arg Glu Lys		125
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Phe Glu Lys Val Pro Gly Lys Tyr Asp Met Leu Gln Met Asp Tyr Ala		140
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Thr Asn Thr Gln Asp Glu Glu Glu Thr Lys Lys Glu Glu Ser Leu Lys		160
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Ser Pro Leu Lys Pro Glu Ser Gln Leu Asp Leu Arg Val Gln Glu Leu		175
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Gln Ile Lys Ala Gly Tyr Gln Ser Leu Lys Lys Ile Glu Asp Cys Ile		220
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Arg Ala Gly Gln His Gly Arg Ala Leu Met Glu Ala Cys Asn Glu Phe		240
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Tyr Thr Arg Ile Pro His Asp Phe Gly Leu Arg Thr Pro Pro Leu Ile		255
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Arg Thr Gln Lys Glu Leu Ser Glu Lys Ile Gln Leu Leu Glu Ala Leu		270
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Gly Asp Ile Glu Ile Ala Ile Lys Leu Val Lys Thr Glu Leu Gln Ser		285
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Arg Pro Leu Asp His Glu Ser Tyr Glu Phe Lys Val Ile Ser Gln Tyr		320
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Ala Pro Ile Thr Gly Tyr Met Phe Gly Lys Gly Ile Tyr Phe Ala Asp		400
	405	410
Met Ser Ser Lys Ser Ala Asn Tyr Cys Phe Ala Ser Arg Leu Lys Asn		415
	420	425
Thr Gly Leu Leu Leu Leu Ser Glu Val Ala Leu Gly Gln Cys Asn Glu		430
	435	440
Leu Leu Glu Ala Asn Pro Lys Ala Glu Gly Leu Leu Gln Gly Lys His		445
	450	455
Ser Thr Lys Gly Leu Gly Lys Met Ala Pro Ser Ser Ala His Phe Val		460
465	470	475
Thr Leu Asn Gly Ser Thr Val Pro Leu Gly Pro Ala Ser Asp Thr Gly		480

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Ile	Leu	Asn	Pro	Asp	Gly	Tyr	Thr	Leu	Asn	Tyr	Asn	Glu	Tyr	Ile	Val				
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Tyr	Asn	Pro	Asn	Gln	Val	Arg	Met	Arg	Tyr	Leu	Leu	Lys	Val	Gln	Phe				
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<213> Homo sapiens

<400> 5347

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<212> PRT

<213> Homo sapiens

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385          390          395          400
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Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
          420          425          430
Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
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Tyr Cys Thr Asp His Glu Ser Ser Ser His His Asp Leu Glu Gly Ala
          450          455          460
Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
465          470          475          480
Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
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Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
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Pro Phe Pro Trp Pro Gly Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu
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Ser Phe Asn Ser Met Leu Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val
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Gln Asn Cys Arg Lys Arg Lys Leu Asp Ile Ile Leu Asn Leu Glu Asp
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Asp Val Cys Asn Leu Gln Ala Lys Lys Glu Thr Leu Lys Arg Glu Gln
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Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp
625          630          635          640
Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro
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Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
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 His Lys Val Ser Ser Gln Glu Gly Glu Gly Arg Ile Pro Leu Pro Gly
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<210> 5354

<211> 605

<212> PRT

<213> Homo sapiens

<400> 5354

Met	Lys	Gly	Ala	Thr	Thr	Asn	Ile	Cys	Tyr	Asn	Val	Leu	Asp	Arg	Asn	1	5	10	15
Val	His	Glu	Lys	Lys	Leu	Gly	Asp	Lys	Val	Ala	Phe	Tyr	Trp	Glu	Gly	20	25	30	
Asn	Glu	Pro	Gly	Glu	Thr	Thr	Gln	Ile	Thr	Tyr	His	Gln	Leu	Leu	Val	35	40	45	
Gln	Val	Cys	Gln	Phe	Ser	Asn	Val	Leu	Arg	Lys	Gln	Gly	Ile	Gln	Lys	50	55	60	
Gly	Asp	Arg	Val	Ala	Ile	Tyr	Met	Pro	Met	Ile	Pro	Glu	Leu	Val	Val	65	70	75	80
Ala	Met	Leu	Ala	Cys	Ala	Arg	Ile	Gly	Ala	Leu	His	Ser	Ile	Val	Phe	85	90	95	
Ala	Gly	Phe	Ser	Ser	Glu	Ser	Leu	Cys	Glu	Arg	Ile	Leu	Asp	Ser	Ser	100	105	110	
Cys	Ser	Leu	Leu	Ile	Thr	Thr	Asp	Ala	Phe	Tyr	Arg	Gly	Glu	Lys	Leu	115	120	125	
Val	Asn	Leu	Lys	Glu	Leu	Ala	Asp	Glu	Ala	Leu	Gln	Lys	Cys	Gln	Glu	130	135	140	
Lys	Gly	Phe	Pro	Val	Arg	Cys	Cys	Ile	Val	Val	Lys	His	Leu	Gly	Arg	145	150	155	160
Ala	Glu	Leu	Gly	Met	Gly	Thr	Pro	Pro	Ala	Ser	Pro	Pro	Gln	Leu	Arg	165	170	175	
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Cys	Asp	Ala	Glu	Asp	Pro	Leu	Phe	Ile	Leu	Tyr	Thr	Ser	Gly	Ser	Thr	210	215	220	
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Phe	Trp	Cys	Thr	Ala	Asp	Ile	Gly	Trp	Ile	Thr	Gly	His	Ser	Tyr	Val	260	265	270	
Thr	Tyr	Gly	Pro	Leu	Ala	Asn	Gly	Ala	Thr	Ser	Val	Leu	Phe	Glu	Gly				

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Tyr Lys Val Thr Lys Phe Tyr Thr Ala Pro Thr Ala Ile Arg Leu Leu		
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Met Lys Phe Gly Asp Glu Pro Val Thr Lys His Ser Arg Ala Ser Leu		
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Gln Val Leu Gly Thr Val Gly Glu Pro Ile Asn Pro Glu Ala Trp Leu		
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Trp Tyr His Arg Val Val Gly Ala Gln Arg Cys Pro Ile Val Asp Thr		
355	360	365
Phe Trp Gln Thr Glu Thr Gly Gly His Met Leu Thr Pro Leu Pro Val		
370	375	380
Pro Thr Pro Met Lys Pro Gly Ser Ala Thr Phe Pro Phe Phe Gly Val		
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Ala Pro Ala Ile Leu Asn Glu Ser Gly Glu Glu Leu Glu Gly Glu Ala		
405	410	415
Glu Gly Tyr Leu Val Phe Lys Gln Pro Trp Pro Gly Ile Met Arg Thr		
420	425	430
Val Tyr Gly Asn His Glu Arg Phe Glu Thr Thr Tyr Ser Lys Lys Phe		
435	440	445
Pro Gly Tyr Tyr Val Thr Gly Asp Gly Cys Gln Arg Asp Gln Asp Gly		
450	455	460
Tyr Tyr Trp Ile Thr Gly Arg Ile Asp Asp Met Leu Asn Val Ser Gly		
465	470	475
His Leu Leu Ser Thr Ala Glu Val Glu Ser Ala Leu Val Glu His Glu		
485	490	495
Ala Val Ala Glu Ala Ala Val Val Gly His Pro His Pro Val Lys Gly		
500	505	510
Glu Cys Leu Tyr Cys Phe Val Thr Leu Cys Asp Gly His Thr Phe Ser		
515	520	525
Pro Lys Leu Thr Glu Glu Leu Lys Lys Gln Ile Arg Glu Lys Ile Gly		
530	535	540
Pro Ile Ala Thr Pro Asp Tyr Ile Gln Asn Ala Pro Gly Leu Pro Lys		
545	550	555
Thr Arg Ser Gly Lys Ile Met Arg Arg Val Leu Arg Lys Ile Ala Gln		
565	570	575
Asn Asp His Asp Leu Gly Asp Met Ser Thr Val Ala Asp Pro Ser Val		
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Ile Ser His Leu Phe Ser His Arg Cys Leu Thr Ile Gln		
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<210> 5355

<211> 1596

<212> DNA

<213> Homo sapiens

<400> 5355

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120

gtgctgtacg agatggggcc cgagtactcg agtaatgtgg agcttgccctc cttccactcc
180

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240
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<210> 5356

<211> 245

<212> PRT

<213> Homo sapiens

<400> 5356

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 Cys Arg Phe His Ser Phe Lys Lys Val Leu Tyr Glu Met Gly Pro Glu
 35 40 45
 Tyr Ser Ser Asn Val Glu Leu Ala Ser Phe His Ser Thr Ser Lys Gly
 50 55 60
 Tyr Met Gly Glu Cys Gly Tyr Arg Gly Gly Tyr Met Glu Val Val Asn
 65 70 75 80
 Leu His Pro Glu Ile Lys Gly Gln Leu Val Lys Leu Leu Ser Val Arg
 85 90 95
 Leu Cys Pro Pro Val Ser Gly Gln Ala Ala Met Asp Ile Val Val Asn
 100 105 110
 Pro Pro Val Ala Gly Glu Glu Ser Phe Glu Gln Phe Ser Arg Glu Lys
 115 120 125
 Glu Ser Val Leu Gly Asn Leu Ala Lys Lys Ala Lys Leu Thr Glu Asp
 130 135 140
 Leu Phe Asn Gln Val Pro Gly Ile His Cys Asn Pro Leu Gln Gly Ala
 145 150 155 160
 Met Tyr Ala Phe Pro Arg Ile Phe Ile Pro Ala Lys Ala Val Glu Ala
 165 170 175
 Ala Gln Ala His Gln Met Ala Pro Asp Met Phe Tyr Cys Met Lys Leu
 180 185 190
 Leu Glu Glu Thr Gly Ile Cys Val Val Pro Gly Ser Gly Phe Gly Gln
 195 200 205
 Arg Glu Gly Thr Tyr His Phe Arg Met Thr Ile Leu Pro Pro Val Glu
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<210> 5357

<211> 1722

<212> DNA

<213> Homo sapiens

<400> 5357

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<210> 5358

<211> 321

<212> PRT

<213> Homo sapiens

<400> 5358

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			20					25					30				
Leu	Val	Thr	Leu	Leu	Gly	Leu	Ala	Val	Gly	Ser	Tyr	Leu	Val	Arg	Arg		
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Ser	Arg	Arg	Pro	Gln	Val	Thr	Leu	Leu	Asp	Pro	Asn	Glu	Lys	Tyr	Leu		
	50					55					60						
Leu	Arg	Leu	Leu	Asp	Lys	Thr	Thr	Val	Ser	His	Asn	Thr	Lys	Arg	Phe		
65					70					75					80		
Arg	Phe	Ala	Leu	Pro	Thr	Ala	His	His	Thr	Leu	Gly	Leu	Pro	Val	Gly		
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Lys	His	Ile	Tyr	Leu	Ser	Thr	Arg	Ile	Asp	Gly	Ser	Leu	Val	Ile	Arg		
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Pro	Tyr	Thr	Pro	Val	Thr	Ser	Asp	Glu	Asp	Gln	Gly	Tyr	Val	Asp	Leu		
		115					120					125					
Val	Ile	Lys	Val	Tyr	Leu	Lys	Gly	Val	His	Pro	Lys	Phe	Pro	Glu	Gly		
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Glu	Phe	Arg	Gly	Pro	Ser	Gly	Leu	Leu	Thr	Tyr	Thr	Gly	Lys	Gly	His		
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Phe	Asn	Ile	Gln	Pro	Asn	Lys	Lys	Ser	Pro	Pro	Glu	Pro	Arg	Val	Ala		
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Lys	Lys	Leu	Gly	Met	Ile	Ala	Gly	Gly	Thr	Gly	Ile	Thr	Pro	Met	Leu		
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Gln	Leu	Ile	Arg	Ala	Ile	Leu	Lys	Val	Pro	Glu	Asp	Pro	Thr	Gln	Cys		
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Phe	Leu	Leu	Phe	Ala	Asn	Gln	Thr	Glu	Lys	Asp	Ile	Ile	Leu	Arg	Glu		
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			245						250					255			
Phe	Thr	Leu	Asp	His	Pro	Pro	Lys	Asp	Trp	Ala	Tyr	Ser	Lys	Gly	Phe		
		260						265					270				
Val	Thr	Ala	Asp	Met	Ile	Arg	Glu	His	Leu	Pro	Ala	Pro	Gly	Asp	Asp		
	275						280						285				
Val	Leu	Val	Leu	Leu	Cys	Gly	Pro	Pro	Pro	Met	Val	Gln	Leu	Ala	Cys		
	290					295					300						
His	Pro	Asn	Leu	Asp	Lys	Leu	Gly	Tyr	Ser	Gln	Lys	Met	Arg	Phe	Thr		
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<210> 5359

<211> 5003

<212> DNA

<213> Homo sapiens

<400> 5359

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120

gaagtctaca gcagctgcga caccacgggg actggctttc tggaccgcca ggagctgacc
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<210> 5360

<211> 1406

<212> PRT

<213> Homo sapiens

<400> 5360

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 35 40 45
 Gly Phe Leu Asp Arg Gln Glu Leu Thr Gln Leu Cys Leu Lys Leu His
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 His Phe Ala Arg Val Asn Phe Glu Glu Phe Lys Glu Gly Phe Val Ala
 85 90 95
 Val Leu Ser Ser Asn Ala Gly Val Arg Pro Ser Asp Glu Asp Ser Ser
 100 105 110
 Ser Leu Glu Ser Ala Ala Ser Ser Ala Ile Pro Pro Lys Tyr Val Asn
 115 120 125
 Gly Ser Lys Trp Tyr Gly Arg Arg Ser Arg Pro Glu Leu Cys Asp Ala
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 Ala Thr Glu Ala Arg Arg Val Pro Glu Gln Gln Thr Gln Ala Ser Leu
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 Lys Ser His Leu Trp Arg Ser Ala Ser Leu Glu Ser Val Glu Ser Pro
 165 170 175
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 180 185 190
 Phe Glu Ala Gln Gly Gln Leu Gln Thr Trp Asp Ser Glu Asp Phe Gly
 195 200 205
 Ser Pro Gln Lys Ser Cys Ser Pro Ser Phe Asp Thr Pro Glu Ser Gln
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 225 230 235 240
 Ser Glu Gln Glu Leu Ala Val Val Cys Gln Ser Val Gly Leu Gln Gly
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 Gly Asp Gly Lys Val Ser Leu Glu Glu Phe Gln Leu Gly Leu Phe Ser
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 325 330 335
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His	Ser	Thr	Leu	Glu	Gln	Leu	Thr	Glu	Lys	Lys	Ile	Lys	His	Leu	Glu
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Gln	Gly	Tyr	Arg	Glu	Arg	Leu	Ser	Leu	Leu	Arg	Ser	Glu	Val	Glu	Ala
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Leu	Gln	Lys	Asp	Leu	Glu	Phe	Val	Leu	Lys	Asp	Lys	Leu	Glu	Pro	Gln
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Glu	Thr	Glu	Leu	Met	Met	Glu	Gln	Val	Lys	Glu	His	Tyr	Gln	Asp	Leu
		645						650					655		
Arg	Thr	Gln	Leu	Glu	Thr	Lys	Val	Asn	Tyr	Tyr	Glu	Arg	Glu	Ile	Ala
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	690					695					700				
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Leu	Gln	Asp	Thr	Ala	Arg	Gly	Pro	Glu	Pro	Glu	Gln	Met	Gly	Leu	Ala
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Pro	Cys	Cys	Thr	Gln	Ala	Leu	Cys	Gly	Leu	Ala	Leu	Arg	His	His	Ser
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	770					775					780				
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785				790					795						800
Glu	Gln	Leu	Glu	Leu	Glu	Arg	Ala	Leu	Lys	Leu	Gln	Pro	Cys	Ala	Ser
		805						810					815		
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4541

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Asp Arg Val Ala Glu Leu His Arg Leu Leu Ser Leu Gln Gly Glu Gln		1280
	1285	1290
Ala Arg Arg Arg Leu Asp Ala Gln Arg Glu Glu His Glu Lys Gln Leu		1295
	1300	1305
Lys Ala Thr Glu Glu Arg Val Glu Glu Ala Glu Met Ile Leu Lys Asn		1310
	1315	1320
Met Glu Met Leu Leu Gln Glu Lys Val Asp Lys Leu Lys Glu Gln Phe		1325
	1330	1335
Glu Lys Asn Thr Lys Ser Asp Leu Leu Leu Lys Glu Leu Tyr Val Glu		1340
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	1365	1370
Gly Ala Glu Lys Gln Ser Arg Leu Leu Glu Glu Lys Val Arg Ala Leu		1375
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<210> 5361

<211> 1080

<212> DNA

<213> Homo sapiens

<400> 5361

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840

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<210> 5362

<211> 165

<212> PRT

<213> Homo sapiens

<400> 5362

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			20					25					30		
Trp	Ala	Ser	Pro	Ser	Gly	Phe	Phe	Cys	Cys	Cys	Cys	Cys	Phe	Leu	Arg
	35					40						45			
Trp	Ser	Leu	Ala	Leu	Xaa	Ala	Gln	Thr	Glu	Val	Gln	Arg	Pro	Asp	Leu
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Asn	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly	Phe	Lys	Gly	Phe	Ser	Cys	Leu
65				70					75					80	
Ser	Leu	Leu	Ser	Ser	Trp	Asp	Tyr	Arg	His	Pro	Pro	Ala	Arg	Pro	Ala
			85					90					95		
Phe	Phe	Cys	Ile	Phe	Ser	Arg	Asp	Gly	Val	Leu	Ser	Cys	Trp	Pro	Gly
		100						105					110		
Trp	Ser	Arg	Thr	Pro	Asp	Leu	Met	Xaa	Ser	Thr	Arg	Leu	Gly	Leu	Pro
	115					120						125			
Asn	Cys	Trp	Asp	His	Arg	Arg	Glu	Pro	Pro	Arg	Pro	Ala	Val	Cys	Leu
	130					135						140			
Val	Phe	Lys	Pro	Ile	Asn	Glu	Pro	Val	Ser	Leu	Phe	Gly	Ile	Tyr	Asn
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<210> 5363

<211> 894

<212> DNA

<213> Homo sapiens

<400> 5363

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<210> 5364
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<213> Homo sapiens
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<210>	5365
<211>	1824

<212> DNA

<213> Homo sapiens

<400> 5365

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<210> 5366

<211> 477

<212> PRT

<213> Homo sapiens

<400> 5366

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			20					25					30		
His	Asn	Phe	Cys	Arg	Ala	Cys	Ile	Gln	Leu	Ser	Trp	Glu	Lys	Ala	Arg
		35					40					45			
Gly	Lys	Lys	Gly	Arg	Arg	Lys	Arg	Lys	Gly	Ser	Phe	Pro	Cys	Pro	Glu
	50					55					60				
Cys	Arg	Glu	Met	Ser	Pro	Gln	Arg	Asn	Leu	Leu	Pro	Asn	Arg	Leu	Leu
65					70				75					80	
Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
				85					90					95	
Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
			100					105					110		
Asp	Gln	Ser	Pro	Ile	Cys	Val	Val	Cys	Arg	Glu	Ser	Arg	Glu	His	Arg
	115						120					125			
Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
	130					135					140				
Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
145					150				155					160	
Gly	Asn	Leu	Gln	Ala	Arg	Glu	Glu	Gln	Ser	Leu	Ala	Glu	Trp	Gln	Gly
			165					170					175		
Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
			180					185					190		
Asn	Leu	Tyr	Leu	Val	Glu	Glu	Glu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
	195						200					205			
Thr	Glu	Glu	Glu	Glu	Thr	Ala	Ser	Arg	Leu	Arg	Glu	Ser	Val	Ala	Cys
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Leu	Asp	Arg	Gln	Gly	His	Ser	Leu	Glu	Leu	Leu	Leu	Gln	Leu	Glu	
225					230				235					240	
Glu	Arg	Ser	Thr	Gln	Gly	Pro	Leu	Gln	Met	Leu	Gln	Asp	Met	Lys	Glu
			245					250					255		
Pro	Leu	Ser	Arg	Lys	Asn	Asn	Val	Ser	Val	Gln	Cys	Pro	Glu	Val	Ala
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<211> 549
<212> DNA
<213> Homo sapiens
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<210> 5368

<211> 137
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr
 50 55 60
 Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile
 65 70 75 80
 Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu
 85 90 95
 Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu
 100 105 110
 Glu Glu Ile Glu Val Glu Glu Gly Asp Glu Glu Glu Pro Ala Gln Asp
 115 120 125
 His Gln Ala Pro Glu Ala Ala Pro Thr
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<210> 5369
 <211> 646
 <212> DNA
 <213> Homo sapiens

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<210> 5370

<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 5370
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 Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys
 35 40 45
 Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro
 50 55 60
 Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala
 65 70 75 80
 His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro
 85 90 95
 Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg
 100 105 110
 Ser Glu Arg Ala Pro Ser Pro Pro Pro Pro Pro Leu Pro Pro Ser Pro
 115 120 125
 Pro Ser Gly Ile Ser Ser Leu Ser Pro Ser Leu Ser Pro Ser Leu Ser
 130 135 140
 Pro Phe Leu Phe
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<210> 5371
 <211> 1177
 <212> DNA
 <213> Homo sapiens

<400> 5371
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<210> 5372

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5372

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Ala	Ala	Cys	Val	Leu	Thr	Leu	Pro	Arg	Ser	Leu	Leu	Leu	Glu	Pro	Pro
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Arg	Gly	Thr	Pro	Asp	Arg	Ser	Gln	Ala	Asp	Pro	Asp	Phe	Ala	Ser	Glu
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<211> 4221

<212> DNA

<213> Homo sapiens

<400> 5373

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<210> 5374

<211> 886

<212> PRT

<213> Homo sapiens

<400> 5374

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Lys	Lys	Ser	Leu	Gln	Glu	Lys	Gly	Lys	Leu	Ser	Ala	Glu	Glu	Asn	Pro
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Asp	Asp	Ser	Glu	Val	Pro	Ser	Ser	Ser	Gly	Ile	Asn	Ser	Thr	Lys	Ser
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Gln	Asp	Lys	Asp	Val	Asn	Glu	Gly	Glu	Thr	Ser	Asp	Gly	Val	Arg	Lys
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Ser	Val	His	Lys	Val	Phe	Ala	Ser	Met	Leu	Gly	Glu	Asn	Glu	Asp	Asp
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Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Thr
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Pro	Glu	Gln	Pro	Thr	Ala	Gly	Asp	Val	Phe	Val	Leu	Glu	Met	Val	Leu
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Asn	Arg	Glu	Thr	Lys	Lys	Met	Met	Lys	Glu	Lys	Arg	Pro	Arg	Ser	Lys
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		180						185					190		
Tyr	Glu	Asp	Gln	Gly	Asp	Met	Glu	Lys	Ser	Leu	Gln	Phe	Glu	Leu	Ile
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Ala	Ala	His	Leu	Asn	Pro	Ser	Asp	Thr	Glu	Glu	Trp	Val	Arg	Leu	Ala
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Glu	Met	Ser	Leu	Glu	Gln	Asp	Asn	Ile	Lys	Gln	Ala	Ile	Phe	Cys	Tyr
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Thr	Lys	Ala	Leu	Lys	Tyr	Glu	Pro	Thr	Asn	Val	Arg	Tyr	Leu	Trp	Glu
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Gln	Gly	Leu	Val	Ser	Met	Glu	Asp	Val	Asn	Ile	Ala	Ala	Glu	Leu	Tyr
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			370					375					380				
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			420					425					430				
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Cys	Ser	Glu	Arg	Tyr	Asn	Leu	Ala	Val	Val	Trp	Leu	Arg	His	Ala	Glu		
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Leu	Gly	Gln	Tyr	Val	Gln	Ala	Phe	Arg	Thr	His	Pro	Asp	Glu	Pro	Leu		
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Tyr Tyr Gln Lys Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile				
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<211> 526

<212> DNA

<213> Homo sapiens

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<211> 112

<212> PRT

<213> Homo sapiens

<400> 5376

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Leu Gln Arg Ala Ala Ala Ser Ser Glu Ser Pro Val Ala Arg Thr Trp			
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Cys His Arg Pro Arg Thr Ile Ser Ile Phe Asn Pro Arg Asn His Thr				
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<213> Homo sapiens

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<211> 508

<212> PRT

<213> Homo sapiens

<400> 5384

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His	Pro	Thr	Val	Leu	Phe
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<211> 125

<212> PRT

<213> Homo sapiens

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<210> 5389

<211> 1711

<212> DNA

<213> Homo sapiens

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<211> 118

<212> PRT

<213> Homo sapiens

<400> 5390

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<212> DNA

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<213> Homo sapiens

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<211> 354

<212> PRT

<213> Homo sapiens

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<210> 5395

<211> 3711

<212> DNA

<213> Homo sapiens

<400> 5395

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<212> DNA

<213> Homo sapiens

<400> 5397

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Ser Arg Pro Pro Arg Val Val Gly Glu Ser Thr Gly Arg Lys Ala Gly
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 65 70 75 80
 Ala Gly Met Gln Tyr Pro Gln Gln Gln Met Pro Pro Gln Tyr Gly Gln
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 Gln Gly Val Ser Gly Tyr Cys Gln Gln Gly Gln Gln Pro Tyr Tyr Ser
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<211> 507

<212> PRT

<213> Homo sapiens

<400> 5402

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<212> DNA

<213> Homo sapiens

<400> 5403

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<210> 5404

<211> 150

<212> PRT

<213> Homo sapiens

<400> 5404

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Cys	Ala	Arg	Pro	His	Ala	Leu	Val	Arg	Ala	Ala	Gly	Ser	Gly	Ser	Gly	
			20					25					30			
Ser	Pro	Ala	Leu	Thr	Met	Ala	Pro	Ser	Ser	Leu	Gly	Ala	Leu	Gly	Pro	
		35				40					45					
Trp	Val	Gly	Ala	Leu	Glu	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Leu	Ser	Gln	
	50				55					60						
Pro	Gly	Thr	His	Ala	Gly	Ala	Xaa	Asp	Pro	Arg	Pro	Ser	Leu	Arg	Lys	
65				70				75						80		
Ala	Ser	Leu	Arg	Ala	Ala	Ser	Pro	Ala	Ala	Ser	Ser	Ser	Pro	Trp	Ala	
			85					90						95		
Arg	Val	Pro	Cys	Ser	Arg	Ala	Arg	Arg	Pro	Lys	Ser	Ala	Glu	Leu	Leu	
		100					105						110			
Arg	Ile	Pro	Gly	Thr	Ser	Thr	Arg	Pro	Lys	Lys	Glu	Arg	Gly	Cys	Pro	
	115					120					125					
Ser	Pro	Gly	Leu	Pro	Ala	Ala	Gly	Pro	Gly	Pro	Ser	Pro	Ala	Gly	Arg	
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<210> 5405

<211> 1609

<212> DNA

<213> Homo sapiens

<400> 5405

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120
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180
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240
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300
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360
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420
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480
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720
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1609

<210> 5406
 <211> 291
 <212> PRT
 <213> Homo sapiens

<400> 5406
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 Ala Gln Cys Leu Arg Asn Gly Gln Val Ile Glu Pro Asp Lys Asn Arg
 35 40 45
 Lys Tyr Cys Ser Ala Lys Ala Arg His Ser Trp Thr Lys Asp Arg Arg
 50 55 60
 Ala Met Arg Val Met Ser Ile Glu Arg Lys Lys Trp Met Asn Ile Arg
 65 70 75 80
 Pro Leu Pro Thr Lys Lys Gln Met Pro Leu Gln Phe Asp Leu Cys Asn
 85 90 95
 His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe
 100 105 110
 Ala His Ser Pro Glu Glu Arg Glu Val Trp Thr Tyr Met Lys Glu Asn
 115 120 125
 Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln
 130 135 140
 Lys Asn Glu Lys Ser Glu Asp Ile Ala Ser Gln Ser Asn Lys Glu Asn
 145 150 155 160
 Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp
 165 170 175
 Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp
 180 185 190
 Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr
 195 200 205
 Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe
 210 215 220
 Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser
 225 230 235 240
 Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg
 245 250 255
 Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu
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 Ile Gly Pro Asn Asp Asn Asp Phe Gly Lys Tyr Ser Phe Leu Phe Lys
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 Asp Leu Asn
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<210> 5407
 <211> 2010
 <212> DNA
 <213> Homo sapiens

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180
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240
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360
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420
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480
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540
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600
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660
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720
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780
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960
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aatcgtgtgt gtttgaaaag aagaatgcaa cttgtatatt ttgtattacc tcttttttct
1140
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1560
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1620
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1680

gaatgacaat tttttgtatt tgctttttct ccctttaaga gcacattctt ctgtaaggag
 1740
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 1860
 tacttttctg gtaatgggtt aaatatcatt tgttatgcat ttttaagata cagttcagaa
 1920
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 1980
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 2010

<210> 5408
 <211> 335
 <212> PRT
 <213> Homo sapiens

<400> 5408
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 20 25 30
 Lys Glu Met Val Leu Ser Glu Lys Val Ser Gln Leu Met Glu Trp Thr
 35 40 45
 Asn Lys Arg Pro Val Ile Arg Met Asn Gly Asp Lys Phe Arg Arg Leu
 50 55 60
 Val Lys Ala Pro Pro Arg Asn Tyr Ser Val Ile Val Met Phe Thr Ala
 65 70 75 80
 Leu Gln Leu His Arg Gln Cys Val Val Cys Lys Gln Ala Asp Glu Glu
 85 90 95
 Phe Gln Ile Leu Ala Asn Ser Trp Arg Tyr Ser Ser Ala Phe Thr Asn
 100 105 110
 Arg Ile Phe Phe Ala Met Val Asp Phe Asp Glu Gly Ser Asp Val Phe
 115 120 125
 Gln Met Leu Asn Met Asn Ser Ala Pro Thr Phe Ile Asn Phe Pro Ala
 130 135 140
 Lys Gly Lys Pro Lys Arg Gly Asp Thr Tyr Glu Leu Gln Val Arg Gly
 145 150 155 160
 Phe Ser Ala Glu Gln Ile Ala Arg Trp Ile Ala Asp Arg Thr Asp Val
 165 170 175
 Asn Ile Arg Val Ile Arg Pro Pro Asn Tyr Ala Gly Pro Leu Met Leu
 180 185 190
 Gly Leu Leu Leu Ala Val Ile Gly Gly Leu Val Tyr Leu Arg Arg Ser
 195 200 205
 Asn Met Glu Phe Leu Phe Asn Lys Thr Gly Trp Ala Phe Ala Ala Leu
 210 215 220
 Cys Phe Val Leu Ala Met Thr Ser Gly Gln Met Trp Asn His Ile Arg
 225 230 235 240
 Gly Pro Pro Tyr Ala His Lys Asn Pro His Thr Gly His Val Asn Tyr
 245 250 255
 Ile His Gly Ser Ser Gln Ala Gln Phe Val Ala Glu Thr His Ile Val
 260 265 270
 Leu Leu Phe Asn Gly Gly Val Thr Leu Gly Met Val Leu Leu Cys Glu

	275		280		285	
Ala	Ala Thr Ser Asp Met Asp	Ile Gly Lys Arg	Lys Ile Met Cys Val			
	290		295		300	
Ala	Gly Ile Gly Leu Val Val	Leu Phe Phe Ser Trp	Met Leu Ser Ile			
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<210> 5409
 <211> 2019
 <212> DNA
 <213> Homo sapiens

<400> 5409
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 240
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 300
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 360
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 420
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 480
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 660
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 1020
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 1080
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 1140
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 1200

caaaagaggc tctgtcagag atgatctggg tgacagattg cagttaaaaa catcatctat
 1260
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 1320
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 1380
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 1440
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 1500
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 1920
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 1980
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 2019

<210> 5410

<211> 198

<212> PRT

<213> Homo sapiens

<400> 5410

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			20					25					30		
Gln	Ile	Glu	Gln	Gly	Met	Asp	Met	Val	Ile	Ser	Ser	Val	Ile	Gly	Glu
		35					40					45			
Ser	Tyr	Arg	Leu	Gln	Ser	Met	Gln	Cys	Ser	Ser	Leu	Phe	Gln	Phe	Asp
	50					55					60				
Phe	Gln	Glu	Ala	Val	Lys	Asn	Phe	Phe	Pro	Pro	Gly	Asn	Glu	Val	Val
65					70				75					80	
Asn	Gly	Glu	Asn	Leu	Ser	Phe	Ala	Tyr	Glu	Phe	Lys	Ala	Asp	Ala	Leu
			85					90					95		
Phe	Asp	Phe	Phe	Tyr	Trp	Phe	Gly	Leu	Ser	Asn	Ser	Val	Val	Lys	Val
			100					105					110		
Asn	Gly	Lys	Val	Leu	Asn	Leu	Ser	Ser	Thr	Ser	Pro	Glu	Lys	Lys	Glu
		115					120					125			
Thr	Ile	Lys	Leu	Phe	Leu	Glu	Lys	Met	Ser	Glu	Pro	Leu	Ile	Arg	Arg
	130					135					140				
Ser	Ser	Phe	Ser	Asp	Arg	Lys	Phe	Ser	Val	Thr	Ser	Arg	Gly	Ser	Ile

145 150 155 160
 Asp Asp Val Phe Asn Cys Asn Leu Ser Pro Arg Ser Ser Leu Thr Glu
 165 170 175
 Pro Leu Leu Ala Glu Leu Pro Phe Pro Ser Val Leu Glu Ser Glu Glu
 180 185 190
 Thr Pro Asn Gln Phe Ile
 195

<210> 5411

<211> 2802

<212> DNA

<213> Homo sapiens

<400> 5411

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 180
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 720
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 780
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 1200

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<210> 5412
 <211> 642
 <212> PRT
 <213> Homo sapiens

<400> 5412

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			20					25					30		
Gly	Glu	Ile	Leu	Tyr	Asn	Asn	Phe	Leu	Phe	Asp	Ile	Pro	Lys	Ile	Leu
		35					40					45			
Asp	Leu	Cys	Val	Leu	Phe	Gly	Lys	Gly	Asn	Ser	Pro	Leu	Leu	Gln	Lys
	50					55				60					
Met	Ile	Gly	Asn	Ile	Phe	Thr	Gln	Gln	Pro	Ser	Tyr	Tyr	Ser	Asp	Leu
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His	Cys	Gly	Leu	Gln	Gly	Asp	Gly	Ala	Asn	Thr	Thr	Pro	Gln	Lys	Leu
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Glu	Glu	Arg	Gly	Arg	Leu	Thr	Pro	Ser	Asp	Met	Pro	Leu	Leu	Glu	Leu
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Lys	Asp	Ile	Val	Leu	Tyr	Leu	Cys	Asp	Thr	Cys	Thr	Thr	Leu	Trp	Ala
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Phe	Leu	Asp	Ile	Phe	Pro	Leu	Ala	Cys	Gln	Thr	Phe	Gln	Lys	His	Asp
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Phe	Cys	Tyr	Arg	Leu	Ala	Ser	Phe	Tyr	Glu	Ala	Ala	Ile	Pro	Glu	Met
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Glu	Ser	Ala	Ile	Lys	Lys	Arg	Arg	Leu	Glu	Asp	Ser	Lys	Leu	Leu	Gly
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Asp	Leu	Trp	Gln	Arg	Leu	Ser	His	Ser	Arg	Lys	Lys	Leu	Met	Glu	Ile
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Phe	His	Ile	Ile	Leu	Asn	Gln	Ile	Cys	Leu	Leu	Pro	Ile	Leu	Glu	Ser
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Ser	Cys	Asp	Asn	Ile	Gln	Gly	Phe	Ile	Glu	Glu	Phe	Leu	Gln	Ile	Phe
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Ser	Ser	Leu	Leu	Gln	Glu	Lys	Arg	Phe	Leu	Arg	Asp	Tyr	Asp	Ala	Leu
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Phe	Pro	Val	Ala	Glu	Asp	Ile	Ser	Leu	Leu	Gln	Gln	Ala	Ser	Ser	Val
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Leu	Asp	Glu	Thr	Arg	Thr	Ala	Tyr	Ile	Leu	Gln	Ala	Val	Glu	Ser	Ala
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Trp	Glu	Gly	Val	Asp	Arg	Arg	Lys	Ala	Thr	Asp	Ala	Lys	Asp	Pro	Ser
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Glu	Cys	Met	Gly	Ala	Ala	Ala	Ala	Val	Gly	Pro	Ala	Met	Cys	Gly	Val
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Glu Gln Val Ile Asn Asn Ile Leu Glu Glu Arg Leu Ala Pro Thr Leu		
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Ser Gln Leu Asp Arg Asn Leu Asp Arg Glu Met Lys Pro Asp Pro Thr		400
	405	410
Pro Leu Leu Thr Ser Arg His Asn Val Phe Gln Asn Asp Glu Phe Asp		415
	420	425
Val Phe Ser Arg Asp Ser Val Asp Leu Ser Arg Val His Lys Gly Lys		430
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Ser Thr Arg Lys Glu Glu Asn Thr Arg Ser Leu Leu Asn Asp Lys Arg		445
	450	455
Ala Val Ala Ala Gln Arg Gln Arg Tyr Glu Gln Tyr Ser Val Val Val		460
	465	470
Glu Glu Val Pro Leu Gln Pro Gly Glu Ser Leu Pro Tyr His Ser Val		475
	485	490
Tyr Tyr Glu Asp Glu Tyr Asp Asp Thr Tyr Asp Gly Asn Gln Val Gly		495
	500	505
Ala Asn Asp Ala Asp Ser Met Thr Ser Ser Ser Ala Ala Gly His Ser		510
	515	520
Pro Ser Gln Val Leu Arg Thr Lys Val Pro Arg Glu Gly Gln Glu Glu		525
	530	535
Asp Asp Asp Asp Glu Glu Asp Asp Ala Asp Glu Glu Ala Pro Lys Pro		540
	545	550
Asp His Phe Val Gln Asp Pro Ala Val Leu Arg Glu Lys Ala Glu Ala		555
	565	570
Arg Arg Met Ala Phe Leu Ala Lys Lys Gly Tyr Arg His Asp Ser Ser		575
	580	585
Thr Ala Val Ala Gly Ser Pro Arg Gly His Gly Gln Ser Arg Glu Thr		590
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Thr Gln Glu Arg Arg Lys Lys Glu Ala Asn Lys Ala Thr Arg Ala Asn		605
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His Asn Arg Arg Thr Met Ala Asp Arg Lys Arg Ser Lys Gly Met Ile		620
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<210> 5413

<211> 1677

<212> DNA

<213> Homo sapiens

<400> 5413

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360

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1677

<210> 5414

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5414

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Lys Asn Asn Ile Lys Ala Ser Leu His Asn Val Lys Ser Ser Leu Pro
                50                55                60
Leu Phe Asn Thr Lys Ser Ser Thr Ser Val Gly Gln Leu Gln Ser Pro
65                70                75                80
Thr Leu Asn Ser Pro Ile Tyr Met Gln Lys Gln Gly Lys Asn Glu His
                85                90                95
Leu Ala Phe Asn Thr Lys Ser Lys Ala Ser Thr Val Gly Ser Glu Leu
                100                105                110
Val Leu Val Ser Thr Thr Val Pro Thr Val His His Val Ser Asp Leu
                115                120                125
Glu Met Ser Ser Thr Leu Asp Cys Leu Pro Val Leu Ala Asp Trp Glu
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Asp Val Val Leu Leu Pro Ala Ser Gln Pro Glu Glu Asn Val Asp Cys
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Thr Val Pro Ile Ser Asp Ser Asp Leu Glu Ile Ser Phe Asn Ser Gly
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Glu Arg Leu Met Val Leu Lys Glu Leu Glu Met Ser Ser His Glu Asn
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Phe Gly Asp Ile Glu Glu Thr Pro Gln Lys Ser Glu Thr Ser Lys Ser
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Ile Val Tyr Lys Ser Pro His Thr Thr Ile Tyr Asn Val Lys Glu Ala
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Lys Asp Pro Gly Ser Asp Ile Ser Ala Phe Lys Leu Pro Glu His Lys
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Ser Ser Thr Phe Asn Arg Val Asn Ala Asn Met Ser His Pro Leu Val
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Leu Gly Lys His Pro Leu Leu Ser Gly Gly Thr Lys Arg Asn Pro Cys
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Glu Glu Lys Pro Thr Ser Ser Asp Cys Ser Pro Val Arg Ser Ser Ser
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Pro Trp Lys Ser Gly Lys Met Thr Pro Pro Leu Cys Lys Cys Gly Arg
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Cys Gly Tyr Phe Lys Trp Glu Gln Thr Leu Gln Lys Glu Arg Ala Asn
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Ser Met Val Pro Ser His Ser Thr Gly Gly Leu Thr Phe Ser Ser Pro
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<210> 5415

<211> 1493

<212> DNA

<213> Homo sapiens

<400> 5415

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<400> 5417
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<210> 5418

<211> 528

<212> PRT

<213> Homo sapiens

<400> 5418

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			20					25						30	
Arg	Leu	Leu	Lys	Glu	Pro	Glu	Lys	Glu	Arg	Asp	Ser	Asp	Ser	Asp	Phe
			35				40					45			
Ser	Pro	Leu	Gln	Gln	Thr	Glu	Gly	Cys	Gln	Arg	Arg	Asp	Lys	His	Phe
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Arg	His	Ala	Glu	Asn	Pro	His	His	Pro	Leu	Lys	Thr	Ser	Ser	Arg	Ala

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<210> 5419
 <211> 989
 <212> DNA
 <213> Homo sapiens

<400> 5419
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<210> 5420
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 5420
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Thr Arg Arg Tyr Tyr Arg Ser Pro Ser Arg Tyr Arg Ser Arg Ser Arg
      50      55      60
Ser Arg Ser Arg Ser Arg Gly Arg Ser Tyr Cys Gly Arg Ala Tyr Ala
65      70      75      80
Ile Ala Arg Gly Gln Arg Tyr Tyr Gly Phe Gly Arg Thr Val Tyr Pro
      85      90      95
Glu Glu His Ser Arg Trp Arg Asp Arg Ser Arg Thr Arg Ser Arg Ser
      100      105      110
Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg Met Glu Leu Leu Glu
      115      120      125
Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly Thr Thr Asn Ile Asp
      130      135      140
Leu Pro Ala Ser Leu Arg Thr Val Pro Ser Ala Lys Glu Thr Ser Arg
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<210> 5421

<211> 1239

<212> DNA

<213> Homo sapiens

<400> 5421

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840

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<210> 5422

<211> 276

<212> PRT

<213> Homo sapiens

<400> 5422

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			20					25					30		
Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr	Cys
		35					40					45			
Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser	Met
	50					55					60				
Gly	Asn	Trp	Ser	Met	Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Val	Thr	Leu
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Ile	Ile	Leu	Ile	Val	Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu
			85					90						95	
Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe
			100					105					110		
Cys	Leu	Ser	Ala	Ser	Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe	Leu
		115					120					125			
Ser	His	Gly	Arg	Ser	Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser
	130					135					140				
Cys	Ile	Ala	Cys	Val	Ala	Tyr	Ala	Thr	Glu	Val	Ala	Trp	Thr	Arg	Ala
145				150					155					160	
Arg	Pro	Gly	Glu	Ile	Thr	Gly	Tyr	Met	Ala	Thr	Val	Pro	Gly	Leu	Leu
			165					170						175	
Lys	Val	Leu	Glu	Thr	Phe	Val	Ala	Cys	Ile	Ile	Phe	Ala	Phe	Ile	Ser
		180						185				190			
Asp	Pro	Asn	Leu	Tyr	Gln	His	Gln	Pro	Ala	Leu	Glu	Trp	Cys	Val	Ala
	195					200					205				
Val	Tyr	Ala	Ile	Cys	Phe	Ile	Leu	Ala	Ala	Ile	Ala	Ile	Leu	Leu	Asn
	210				215					220					
Leu	Gly	Glu	Cys	Thr	Asn	Val	Leu	Pro	Ile	Pro	Phe	Pro	Ser	Phe	Leu
225				230					235					240	
Ser	Gly	Leu	Ala	Leu	Cys	Leu	Ser	Ser	Ser	Met	Pro	Pro	Pro	Leu	Phe
			245					250						255	
Ser	Gly	Pro	Ser	Thr	Ser	Ser	Met	Arg	Ser	Met	Ala	Ala	Ser	Leu	Gly

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Ala Arg Glu Met
275

<210> 5423
<211> 2427
<212> DNA
<213> Homo sapiens

<400> 5423
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120
cctgagttat tctccccacc tcagaagtac cagcttttgg tgtatcatgc agattctctc
180
tttcatgata aggaatatcg gaatgctgtg agtaagtata ccatggcttt acagcagaag
240
aaagcgctaa gtaaaacttc aaaagtgaga ccttcaactg gaaattctgc atctactcca
300
caaagtcagt gtcttccatc tgaaattgaa gtgaaataca aaatggctga atgttataca
360
atgctaaaac aagataaaga tgccattgct atacttgatg ggatcccttc aagacaaaga
420
actcccaaaa taaacatgat gctggcaaac ctgtacaaga aggctgggtca ggagcgcctt
480
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540
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600
caaaccgtgc ctaacttgga ctggctctct gtgtggatca aagcgtatgc ttttgtgcac
660
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720
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780
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840
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1020
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1080
agagtccaag aagcaataat ccactttcgg gaggccatac ggctcgacc ttgtcgctta
1140
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1200
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1260
gccaccgttt gtcttgaaga cccagtgaac caggagaaag ccaaacatt attagataaa
1320

gccctgaccc aaaggccaga ttacattaag gctgtggtga aaaaagcaga actacttagc
 1380
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 1440
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 1500
 gcaatggacc agtatagtat agcactaagt ttggacccca atgaccagaa gtctctagag
 1560
 gggatgcaga agatggagaa ggaggagagt cccacggatg ccaactcagga ggaggatgtg
 1620
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 1680
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 1740
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 1860
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 1920
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 1980
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 2040
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 2100
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 2160
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 2280
 aacttgccctc tgagcctggg ctgatctgag aaacaggtgt gacaagagca tgaaccagag
 2340
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 2400
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 2427

<210> 5424

<211> 570

<212> PRT

<213> Homo sapiens

<400> 5424

Met	Ala	Ala	Ala	Gly	Leu	His	Ser	Asn	Val	Arg	Leu	Leu	Ser	Ser	Leu
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Leu	Leu	Thr	Met	Ser	Asn	Asn	Asn	Pro	Glu	Leu	Phe	Ser	Pro	Pro	Gln
			20					25					30		
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp	Lys
		35					40					45			
Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln	Lys
	50					55					60				
Lys	Ala	Leu	Ser	Lys	Thr	Ser	Lys	Val	Arg	Pro	Ser	Thr	Gly	Asn	Ser

65 70 75 80
Ala Ser Thr Pro Gln Ser Gln Cys Leu Pro Ser Glu Ile Glu Val Lys
85 90 95
Tyr Lys Met Ala Glu Cys Tyr Thr Met Leu Lys Gln Asp Lys Asp Ala
100 105 110
Ile Ala Ile Leu Asp Gly Ile Pro Ser Arg Gln Arg Thr Pro Lys Ile
115 120 125
Asn Met Met Leu Ala Asn Leu Tyr Lys Lys Ala Gly Gln Glu Arg Pro
130 135 140
Ser Val Thr Ser Tyr Lys Glu Val Leu Arg Gln Cys Pro Leu Ala Leu
145 150 155 160
Asp Ala Ile Leu Gly Leu Leu Ser Leu Ser Val Lys Gly Ala Glu Val
165 170 175
Ala Ser Met Thr Met Asn Val Ile Gln Thr Val Pro Asn Leu Asp Trp
180 185 190
Leu Ser Val Trp Ile Lys Ala Tyr Ala Phe Val His Thr Gly Asp Asn
195 200 205
Ser Arg Ala Ile Ser Thr Ile Cys Ser Leu Glu Lys Lys Ser Leu Leu
210 215 220
Arg Asp Asn Val Asp Leu Leu Gly Ser Leu Ala Asp Leu Tyr Phe Arg
225 230 235 240
Ala Gly Asp Asn Lys Asn Ser Val Leu Lys Phe Glu Gln Ala Gln Met
245 250 255
Leu Asp Pro Tyr Leu Ile Lys Gly Met Asp Val Tyr Gly Tyr Leu Leu
260 265 270
Ala Arg Glu Gly Arg Leu Glu Asp Val Glu Asn Leu Gly Cys Arg Leu
275 280 285
Phe Asn Ile Ser Asp Gln His Ala Glu Pro Trp Val Val Ser Gly Cys
290 295 300
His Ser Phe Tyr Ser Lys Arg Tyr Ser Arg Ala Leu Tyr Leu Gly Ala
305 310 315 320
Lys Ala Ile Gln Leu Asn Ser Asn Ser Val Gln Ala Leu Leu Leu Lys
325 330 335
Gly Ala Ala Leu Arg Asn Met Gly Arg Val Gln Glu Ala Ile Ile His
340 345 350
Phe Arg Glu Ala Ile Arg Leu Ala Pro Cys Arg Leu Asp Cys Tyr Glu
355 360 365
Gly Leu Ile Glu Cys Tyr Leu Ala Ser Asn Ser Ile Arg Glu Ala Met
370 375 380
Val Met Ala Asn Asn Val Tyr Lys Thr Leu Gly Ala Asn Ala Gln Thr
385 390 395 400
Leu Thr Leu Leu Ala Thr Val Cys Leu Glu Asp Pro Val Thr Gln Glu
405 410 415
Lys Ala Lys Thr Leu Leu Asp Lys Ala Leu Thr Gln Arg Pro Asp Tyr
420 425 430
Ile Lys Ala Val Val Lys Lys Ala Glu Leu Leu Ser Arg Glu Gln Lys
435 440 445
Tyr Glu Asp Gly Ile Ala Leu Leu Arg Asn Ala Leu Ala Asn Gln Ser
450 455 460
Asp Cys Val Leu His Arg Ile Leu Gly Asp Phe Leu Val Ala Val Asn
465 470 475 480
Glu Tyr Gln Glu Ala Met Asp Gln Tyr Ser Ile Ala Leu Ser Leu Asp
485 490 495
Pro Asn Asp Gln Lys Ser Leu Glu Gly Met Gln Lys Met Glu Lys Glu

			500					505					510				
Glu	Ser	Pro	Thr	Asp	Ala	Thr	Gln	Glu	Glu	Asp	Val	Asp	Asp	Met	Glu		
		515					520					525					
Gly	Ser	Gly	Glu	Glu	Gly	Asp	Leu	Glu	Gly	Ser	Asp	Ser	Glu	Ala	Ala		
		530				535					540						
Gln	Trp	Ala	Asp	Gln	Glu	Gln	Trp	Phe	Gly	Met	Ser	Glu	Gly	Ala	Ala		
545					550					555					560		
Ala	Pro	Trp	Pro	Gln	Trp	Pro	Ala	Leu	Leu								
			565					570									

<210> 5425

<211> 639

<212> DNA

<213> Homo sapiens

<400> 5425

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 120
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 180
 ccacagagga tcggagctgg tggcggggca agcgaggctt ccaggtcggg ttcttcccca
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 gtgagtgtgt ggaactcttc acagagcggc caggtcggg cctgaaggcg gatgccgatg
 300
 gcccccattg tggcatcccg gctccccagg gtatctcgtc tctgacctca gctgtgccac
 360
 ggctctgtgg gaagctggcc ggctgctcc gcaccttcac gcgctccgc ccttctcggc
 420
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 540
 gccnacgggg tgggtgatgg gatctaccgg ctctcaggcg tgtcttccaa catccagagg
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 639

<210> 5426

<211> 98

<212> PRT

<213> Homo sapiens

<400> 5426

Pro	Gln	Leu	Cys	His	Gly	Leu	Val	Gly	Ser	Trp	Pro	Ala	Cys	Ser	Ala		
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Pro	Ser	Cys	Ala	Pro	Ala	Leu	Leu	Gly	Ser	Gly	Cys	Gly	Ser	Gly	Glu		
		20						25				30					
Ser	Cys	Asp	Arg	Gly	Cys	Leu	Ala	Ala	Ile	Leu	Ala	Ser	Thr	Ser	Ala		
		35				40					45						
Thr	Gln	Ala	Arg	Met	Cys	Pro	Val	Leu	Arg	Cys	Cys	Ser	Glu	Phe	Ile		
50					55					60							
Glu	Ala	Xaa	Gly	Val	Val	Asp	Gly	Ile	Tyr	Arg	Leu	Ser	Gly	Val	Ser		

<400> 5429

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120
gcgctgagct gggggaggcc ccgggctccc gcccagcct cgaagccccg cccagggctg
180
gatttgaatt gcttgtggct ccgcccacag cccattttcc tctggaagct gagacccccg
240
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300
accgcacaat gccagctctg cccactctaa ggtcccgccc acttccactc cttggggggcg
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gcaccctccc cttgggtcctg tggggccggt ctccagcaga aaaccacgcc caccaagcag
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480
ctcagatccc ctcacccttg gccagggatc cctctaacc accgtgtccc gactgctgac
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cgggccctac ctccatcttt tccgggttct tctcccagc taggccccgc ccccatcccc
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612

<210> 5430

<211> 94

<212> PRT

<213> Homo sapiens

<400> 5430

Pro	Ala	Gly	Gly	Lys	Ala	Pro	Gly	Gln	His	Gly	Gly	Phe	Val	Val	Thr
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Val	Lys	Gln	Glu	Arg	Gly	Glu	Gly	Pro	Arg	Ala	Gly	Glu	Lys	Gly	Ser
		20					25					30			
His	Glu	Glu	Glu	Val	Arg	Val	Pro	Ala	Leu	Ser	Trp	Gly	Arg	Pro	Arg
		35					40					45			
Ala	Pro	Ala	Pro	Ala	Ser	Lys	Pro	Arg	Pro	Arg	Leu	Asp	Leu	Asn	Cys
	50					55					60				
Leu	Trp	Leu	Arg	Pro	Gln	Pro	Ile	Phe	Leu	Trp	Lys	Leu	Arg	Pro	Arg
65				70				75					80		
Pro	Val	Pro	Ala	Ala	Thr	Pro	Leu	Thr	Gly	Pro	Leu	Pro	Leu		
			85					90							

<210> 5431

<211> 3005

<212> DNA

<213> Homo sapiens

<400> 5431

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120
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180

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240
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300
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360
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420
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600
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660
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720
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 2580
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 aaaaa
 3005

<210> 5432

<211> 863

<212> PRT

<213> Homo sapiens

<400> 5432

Xaa	His	Asp	Val	Ile	Gln	Gln	Leu	Pro	Pro	Pro	His	Tyr	Arg	Thr	Leu
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Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser	Ala	Asn
				20				25					30		
Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

35 40 45
Leu Arg Ser Met Glu Leu Glu Ser Val Gly Met Gly Gly Ala Ala Ala
50 55 60
Phe Arg Glu Val Arg Val Gln Ser Val Val Val Glu Phe Leu Leu Thr
65 70 75 80
His Val Asp Val Leu Phe Ser Asp Thr Phe Thr Ser Ala Gly Leu Asp
85 90 95
Pro Ala Gly Arg Cys Leu Leu Pro Arg Pro Lys Ser Leu Ala Gly Ser
100 105 110
Cys Pro Ser Thr Arg Leu Leu Thr Leu Glu Glu Ala Gln Ala Arg Thr
115 120 125
Gln Gly Arg Leu Gly Thr Pro Thr Glu Pro Thr Thr Pro Lys Ala Pro
130 135 140
Ala Ser Pro Ala Glu Arg Arg Lys Gly Glu Arg Gly Glu Lys Gln Arg
145 150 155 160
Lys Pro Gly Gly Ser Ser Trp Lys Thr Phe Phe Ala Leu Gly Arg Gly
165 170 175
Pro Ser Val Pro Arg Lys Lys Pro Leu Pro Trp Leu Gly Gly Thr Arg
180 185 190
Ala Pro Pro Gln Pro Ser Gly Ser Arg Pro Asp Thr Val Thr Leu Arg
195 200 205
Ser Ala Lys Ser Glu Glu Ser Leu Ser Ser Gln Ala Ser Gly Ala Gly
210 215 220
Leu Gln Arg Leu His Arg Leu Arg Arg Pro His Ser Ser Ser Asp Ala
225 230 235 240
Phe Pro Val Gly Pro Ala Pro Ala Gly Ser Cys Glu Ser Leu Ser Ser
245 250 255
Ser Ser Ser Ser Glu Ser Ser Ser Ser Glu Ser Ser Ser Ser Ser Ser
260 265 270
Glu Ser Ser Ala Ala Gly Leu Gly Ala Leu Ser Gly Ser Pro Ser His
275 280 285
Arg Thr Ser Ala Trp Leu Asp Asp Gly Asp Glu Leu Asp Phe Ser Pro
290 295 300
Pro Arg Cys Leu Glu Gly Leu Arg Gly Leu Asp Phe Asp Pro Leu Thr
305 310 315 320
Phe Arg Cys Ser Ser Pro Thr Pro Gly Asp Pro Ala Pro Pro Ala Ser
325 330 335
Pro Ala Pro Pro Ala Pro Ala Ser Ala Phe Pro Pro Arg Val Thr Pro
340 345 350
Gln Ala Ile Ser Pro Arg Gly Pro Thr Ser Pro Ala Ser Pro Ala Ala
355 360 365
Leu Asp Ile Ser Glu Pro Leu Ala Val Ser Val Pro Pro Ala Val Leu
370 375 380
Glu Leu Leu Gly Ala Gly Gly Ala Pro Ala Ser Ala Thr Pro Thr Pro
385 390 395 400
Ala Leu Ser Pro Gly Arg Ser Leu Arg Pro His Leu Ile Pro Leu Leu
405 410 415
Leu Arg Gly Ala Glu Ala Pro Leu Thr Asp Ala Cys Gln Gln Glu Met
420 425 430
Cys Ser Lys Leu Arg Gly Ala Gln Gly Pro Leu Gly Pro Asp Met Glu
435 440 445
Ser Pro Leu Pro Pro Pro Pro Leu Ser Leu Leu Arg Pro Gly Gly Ala
450 455 460
Pro Pro Pro Pro Pro Lys Asn Pro Ala Arg Leu Met Ala Leu Ala Leu

465		470		475		480									
Ala	Glu	Arg	Ala	Gln	Gln	Val	Ala	Glu	Gln	Gln	Ser	Gln	Gln	Glu	Cys
			485				490							495	
Gly	Gly	Thr	Pro	Pro	Ala	Ser	Gln	Ser	Pro	Phe	His	Arg	Ser	Leu	Ser
			500				505							510	
Leu	Glu	Val	Gly	Gly	Glu	Pro	Leu	Gly	Thr	Ser	Gly	Ser	Gly	Pro	Pro
		515				520							525		
Pro	Asn	Ser	Leu	Ala	His	Pro	Gly	Ala	Trp	Val	Pro	Gly	Pro	Pro	Pro
	530					535					540				
Tyr	Leu	Pro	Arg	Gln	Gln	Ser	Asp	Gly	Ser	Leu	Leu	Arg	Ser	Gln	Arg
545				550						555					560
Pro	Met	Gly	Thr	Ser	Arg	Arg	Gly	Leu	Arg	Gly	Pro	Ala	Gln	Val	Ser
			565						570					575	
Ala	Gln	Leu	Arg	Ala	Gly	Gly	Gly	Gly	Arg	Asp	Ala	Pro	Glu	Ala	Ala
			580				585						590		
Ala	Gln	Ser	Pro	Cys	Ser	Val	Pro	Ser	Gln	Val	Pro	Thr	Pro	Gly	Phe
		595					600					605			
Phe	Ser	Pro	Ala	Pro	Arg	Glu	Cys	Leu	Pro	Pro	Phe	Leu	Gly	Val	Pro
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Lys	Pro	Gly	Leu	Tyr	Pro	Leu	Gly	Pro	Pro	Ser	Phe	Gln	Pro	Ser	Ser
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705				710						715					720
Phe	Pro	Pro	Asp	His	Leu	Gly	Tyr	Ser	Ala	Pro	Gln	His	Pro	Ala	Arg
			725						730					735	
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			740						745					750	
Arg	Gly	Pro	Ser	Pro	Ala	Ser	Ser	Ser	Ser	Ser	Ser	Pro	Pro	Ala	His
		755					760					765			
Pro	Arg	Ser	Arg	Ser	Asp	Pro	Gly	Pro	Pro	Val	Pro	Arg	Leu	Pro	Gln
	770					775					780				
Lys	Gln	Arg	Ala	Pro	Trp	Gly	Pro	Arg	Thr	Pro	His	Arg	Val	Pro	Gly
785				790						795					800
Pro	Trp	Gly	Pro	Pro	Glu	Pro	Leu	Leu	Leu	Tyr	Arg	Ala	Ala	Pro	Pro
			805						810					815	
Ala	Tyr	Gly	Arg	Gly	Gly	Glu	Leu	His	Arg	Gly	Ser	Leu	Tyr	Arg	Asn
			820					825					830		
Gly	Gly	Gln	Arg	Gly	Glu	Gly	Ala	Gly	Pro	Pro	Pro	Pro	Tyr	Pro	Thr
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<210> 5433

<211> 385

<212> DNA

<213> Homo sapiens

<400> 5433

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240
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<210> 5434

<211> 128

<212> PRT

<213> Homo sapiens

<400> 5434

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Thr	Thr	Asp	His	His	Phe	Gly	Ser	Met	Ser	Val	Gly	Asn	Ser	Val	Asn
			20					25					30		
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
			35				40					45			
Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50					55					60				
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
65					70				75					80	
Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
				85				90					95		
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
			100				105					110			
Pro	Pro	Val	Ser	Pro	Leu	Thr	Leu	Ser	Pro	Gly	Pro	Glu	Ala	His	Gln
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<210> 5435

<211> 617

<212> DNA

<213> Homo sapiens

<400> 5435

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120
ccttgataa gtatactttg tataacttct ggcaaaccat aattatgaac tcacattact
180
atagtactat aatactgcag aaagggatct tgcgtttcag aaatgtcact catccagttt
240

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 tgttgcttta agtttggtcc ccaggcttta ctgccaagag ggaaattcat acccacttta
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 600
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 617

<210> 5436

<211> 119

<212> PRT

<213> Homo sapiens

<400> 5436

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His	Pro	Leu	Ile	Ala	Arg	Ala	Lys	Gly	Lys	Thr	Met	Ala	Ser	Ser	Asp
			20					25					30		
Gly	Thr	Ile	Arg	Ala	Asn	Leu	Tyr	Phe	Lys	Ile	Leu	Gln	Pro	Lys	Met
		35					40					45			
Lys	Asn	Asn	His	Ile	Arg	Ser	Cys	Arg	Ala	Val	Leu	His	Arg	Ser	Asp
	50					55					60				
Leu	Leu	Val	Arg	Lys	Leu	Leu	Ala	Leu	Cys	Lys	Glu	Lys	Glu	Asp	Cys
65					70					75				80	
Asn	Arg	Asn	His	Glu	Pro	Gly	Arg	Glu	Met	Gly	Leu	Glu	Lys	Gly	Glu
			85					90						95	
Glu	Asn	Trp	Met	Ser	Asp	Ile	Ser	Glu	Thr	Gln	Asp	Pro	Phe	Leu	Gln
			100					105						110	
Tyr	Tyr	Ser	Thr	Ile	Val	Met									
			115												

<210> 5437

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 5437

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 120
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 240
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 300

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 360
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 420
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 480
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 540
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 600
 tcccagctgg ccaccatggt ttttgatgag gttgtcaaac agaattgtgc tgcctttgag
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 960
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 1020
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 1200
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 1260
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<210> 5438

<211> 245

<212> PRT

<213> Homo sapiens

<400> 5438

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Gly	Ser	Asn	His	Ala	Leu	Gly	Ala	Asn	Val	Glu	Leu	Trp	Ile	Met	Leu
			20					25					30		
Leu	Gln	Val	Val	Arg	Glu	Gly	Lys	Phe	Ser	Gly	Phe	Leu	Thr	Ser	Cys
		35				40					45				
Ser	Leu	Leu	Leu	Pro	Arg	Ala	Ala	Gln	Ile	Leu	Ala	Ala	Glu	Ala	Gly
	50				55					60					
Leu	Pro	Ser	Ser	Arg	Ser	Phe	Met	Gly	Phe	Ala	Ala	Pro	Phe	Thr	Asn

65		70		75		80									
Lys	Arg	Lys	Ala	Tyr	Ser	Glu	Arg	Arg	Ile	Met	Gly	Tyr	Ser	Met	Gln
		85							90					95	
Glu	Met	Tyr	Glu	Val	Val	Ser	Asn	Val	Gln	Glu	Tyr	Arg	Glu	Phe	Val
		100						105					110		
Pro	Trp	Cys	Lys	Lys	Ser	Leu	Val	Val	Ser	Ser	Arg	Lys	Gly	His	Leu
		115					120					125			
Lys	Ala	Gln	Leu	Glu	Val	Gly	Phe	Pro	Pro	Val	Met	Glu	Arg	Tyr	Thr
	130					135					140				
Ser	Ala	Val	Ser	Met	Val	Lys	Pro	His	Met	Val	Lys	Ala	Val	Cys	Thr
145					150					155				160	
Asp	Gly	Lys	Leu	Phe	Asn	His	Leu	Glu	Thr	Ile	Trp	Arg	Phe	Ser	Pro
			165						170					175	
Gly	Ile	Pro	Ala	Tyr	Pro	Arg	Thr	Cys	Thr	Val	Asp	Phe	Ser	Ile	Ser
		180						185					190		
Phe	Glu	Phe	Arg	Ser	Leu	Leu	His	Ser	Gln	Leu	Ala	Thr	Met	Phe	Phe
		195					200					205			
Asp	Glu	Val	Val	Lys	Gln	Asn	Val	Ala	Ala	Phe	Glu	Arg	Arg	Ala	Ala
	210					215					220				
Thr	Lys	Phe	Gly	Pro	Glu	Thr	Ala	Ile	Pro	Arg	Glu	Leu	Met	Phe	His
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<210> 5439

<211> 4234

<212> DNA

<213> Homo sapiens

<400> 5439

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 240
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<210> 5440

<211> 461

<212> PRT

<213> Homo sapiens

<400> 5440

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Arg	Gln	Leu	Arg	Cys	Leu	Val	Val	Asp	Glu	Ala	Asp	Arg	Met	Val	Glu
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Lys	Gly	His	Phe	Ala	Glu	Leu	Ser	Gln	Leu	Leu	Glu	Met	Leu	Asn	Asp
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Ser	Gln	Tyr	Asn	Pro	Lys	Arg	Gln	Thr	Leu	Val	Phe	Ser	Ala	Thr	Leu
			100					105					110		
Thr	Leu	Val	His	Gln	Ala	Pro	Ala	Arg	Ile	Leu	His	Lys	Lys	His	Thr
		115					120					125			
Lys	Lys	Met	Asp	Lys	Thr	Ala	Lys	Leu	Asp	Leu	Leu	Met	Gln	Lys	Ile
		130				135					140				
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Thr	Val	Glu	Thr	Leu	Thr	Glu	Thr	Lys	Ile	His	Cys	Glu	Thr	Asp	Glu
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Lys	Asp	Phe	Tyr	Leu	Tyr	Tyr	Phe	Leu	Met	Gln	Tyr	Pro	Gly	Arg	Ser
		180					185				190				
Leu	Val	Phe	Ala	Asn	Ser	Ile	Ser	Cys	Ile	Lys	Arg	Leu	Ser	Gly	Leu
		195				200					205				
Leu	Lys	Val	Leu	Asp	Ile	Met	Pro	Leu	Thr	Leu	His	Ala	Cys	Met	His
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Gln	Lys	Gln	Arg	Leu	Arg	Asn	Leu	Glu	Gln	Phe	Ala	Arg	Leu	Glu	Asp
225				230					235					240	
Cys	Val	Leu	Leu	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Leu	Asp	Ile	Pro
			245					250				255			
Lys	Val	Gln	His	Val	Ile	His	Tyr	Gln	Val	Pro	Arg	Thr	Ser	Glu	Ile
		260					265					270			
Tyr	Val	His	Arg	Ser	Gly	Arg	Thr	Ala	Arg	Ala	Thr	Asn	Glu	Gly	Leu
	275					280					285				
Ser	Leu	Met	Leu	Ile	Gly	Pro	Glu	Asp	Val	Ile	Asn	Phe	Lys	Lys	Ile

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305	310	315
Thr Lys Tyr Met Asp Val Val Lys Glu Arg Ile Arg Leu Ala Arg Gln		
	325	330
Ile Glu Lys Ser Glu Tyr Arg Asn Phe Gln Ala Cys Leu His Asn Ser		
	340	345
Trp Ile Glu Gln Ala Ala Ala Ala Leu Glu Ile Glu Leu Glu Glu Asp		
	355	360
Met Tyr Lys Gly Gly Lys Ala Asp Gln Gln Glu Glu Arg Arg Arg Gln		
	370	375
Lys Gln Met Lys Val Leu Lys Lys Glu Leu Arg His Leu Leu Ser Gln		
385	390	395
Pro Leu Phe Thr Glu Ser Gln Lys Thr Lys Tyr Pro Thr Gln Ser Gly		
	405	410
Lys Pro Pro Leu Leu Val Ser Ala Pro Ser Lys Ser Glu Ser Ala Leu		
	420	425
Ser Cys Leu Ser Lys Gln Lys Lys Lys Lys Thr Lys Lys Pro Lys Glu		
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<210> 5441

<211> 1635

<212> DNA

<213> Homo sapiens

<400> 5441

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<210> 5442

<211> 250

<212> PRT

<213> Homo sapiens

<400> 5442

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			20					25					30		
Lys	Asn	Lys	Val	Val	Gly	Trp	Arg	Ser	Gly	Val	Glu	Lys	Asp	Leu	Asp
		35					40					45			
Glu	Val	Leu	Gln	Thr	His	Ser	Val	Phe	Val	Asn	Val	Ser	Lys	Gly	Gln
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Val	Ala	Lys	Lys	Glu	Asp	Leu	Ile	Ser	Ala	Phe	Gly	Thr	Asp	Asp	Gln
65					70				75					80	
Thr	Glu	Ile	Cys	Lys	Gln	Ile	Leu	Thr	Lys	Gly	Glu	Val	Gln	Val	Ser
			85					90					95		
Asp	Lys	Glu	Arg	His	Thr	Gln	Leu	Glu	Gln	Met	Phe	Arg	Asp	Ile	Ala
			100					105					110		
Thr	Ile	Val	Ala	Asp	Lys	Cys	Val	Asn	Pro	Glu	Thr	Lys	Arg	Pro	Tyr
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Lys Thr Asn Lys Ser Thr	Lys Gln Gln Ala Leu	Glu Val Ile Lys Gln		
145	150	155	160	
Leu Lys Glu Lys Met Lys	Ile Glu Arg Ala His	Met Arg Leu Arg Phe		
	165	170	175	
Ile Leu Pro Val Asn Glu	Gly Lys Lys Leu Lys	Glu Lys Leu Lys Pro		
	180	185	190	
Leu Ile Lys Val Ile Glu	Ser Glu Asp Tyr Gly	Gln Gln Leu Glu Ile		
	195	200	205	
Val Cys Leu Ile Asp Pro	Gly Cys Phe Arg Glu	Ile Asp Glu Leu Ile		
	210	215	220	
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<210> 5443

<211> 2021

<212> DNA

<213> Homo sapiens

<400> 5443

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 2021

<210> 5444

<211> 438

<212> PRT

<213> Homo sapiens

<400> 5444

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Leu	Asp	Met	Leu	Asn	Asn	Trp	Asp	Lys	Trp	Met	Ala	Lys	Lys	His	Lys
			20					25					30		
Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
			35					40					45		
Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
			50				55				60				
Pro	Gly	Lys	Phe	Asp	Glu	Leu	Asp	Met	Ser	Pro	Gly	Asp	Pro	Lys	Trp
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Leu	Asp	Val	Ile	Glu	Arg	Asp	Leu	His	Arg	Gln	Phe	Pro	Phe	His	Glu

				85				90					95				
Met	Phe	Val	Ser	Arg	Gly	Gly	His	Gly	Gln	Gln	Asp	Leu	Phe	Arg	Val		
			100					105					110				
Leu	Lys	Ala	Tyr	Thr	Leu	Tyr	Arg	Pro	Glu	Glu	Gly	Tyr	Cys	Gln	Ala		
		115					120					125					
Gln	Ala	Pro	Ile	Ala	Ala	Val	Leu	Leu	Met	His	Met	Pro	Ala	Glu	Gln		
		130				135					140						
Ala	Phe	Trp	Cys	Leu	Val	Gln	Ile	Cys	Glu	Lys	Tyr	Leu	Pro	Gly	Tyr		
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Tyr	Ser	Glu	Lys	Leu	Glu	Ala	Ile	Gln	Leu	Asp	Gly	Glu	Ile	Leu	Phe		
				165				170					175				
Ser	Leu	Leu	Gln	Lys	Val	Ser	Pro	Val	Ala	His	Lys	His	Leu	Ser	Arg		
			180				185						190				
Gln	Lys	Ile	Asp	Pro	Leu	Leu	Tyr	Met	Thr	Glu	Trp	Phe	Met	Cys	Ala		
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Phe	Ser	Arg	Thr	Leu	Pro	Trp	Ser	Ser	Val	Leu	Arg	Val	Trp	Asp	Met		
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			245					250					255				
Gln	Tyr	Glu	Thr	Ile	Glu	Arg	Leu	Arg	Ser	Leu	Ser	Pro	Lys	Ile	Met		
			260				265						270				
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		275				280					285						
Arg	Gln	Ile	Glu	Arg	Glu	His	Leu	Ile	Gln	Leu	Arg	Arg	Trp	Gln	Glu		
		290				295					300						
Thr	Arg	Gly	Glu	Leu	Gln	Cys	Arg	Ser	Pro	Pro	Arg	Leu	His	Gly	Ala		
305					310					315					320		
Lys	Ala	Ile	Leu	Asp	Ala	Glu	Pro	Gly	Pro	Arg	Pro	Ala	Leu	Gln	Pro		
				325				330					335				
Ser	Pro	Ser	Ile	Arg	Leu	Pro	Leu	Asp	Ala	Pro	Leu	Pro	Gly	Ser	Lys		
			340				345						350				
Ala	Lys	Pro	Lys	Pro	Pro	Lys	Gln	Ala	Gln	Lys	Glu	Gln	Arg	Lys	Gln		
		355				360					365						
Met	Lys	Gly	Arg	Gly	Gln	Leu	Glu	Lys	Pro	Pro	Ala	Pro	Asn	Gln	Ala		
		370				375					380						
Met	Val	Val	Ala	Ala	Ala	Gly	Asp	Ala	Cys	Pro	Pro	Gln	His	Val	Pro		
385					390				395						400		
Pro	Lys	Asp	Ser	Ala	Pro	Lys	Asp	Ser	Ala	Pro	Gln	Asp	Leu	Ala	Pro		
				405				410					415				
Gln	Val	Ser	Ala	His	His	Arg	Ser	Gln	Glu	Ser	Leu	Thr	Ser	Gln	Glu		
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<210> 5445

<211> 1187

<212> DNA

<213> Homo sapiens

<400> 5445

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<210> 5446

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5446

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Glu	Ser	Lys	His	Thr	Thr	Cys	Ala	Lys	Val	Lys	Trp	Pro	Gln	Pro	Pro
			20					25					30		
Arg	Lys	Thr	Gly	Trp	Arg	Phe	Leu	Arg	Arg	Ser	Thr	His	Ser	Arg	His
		35					40					45			
Gly	Thr	Gln	Trp	Phe	His	Pro	Gln	Val	Cys	Ser	Asn	Arg	His	His	Ser
	50					55					60				
Pro	Arg	Pro	His	Ala	Asp	Ser	Asp	Thr	Arg	Ala	His	Ser	Pro	Arg	Ser

65		70		75		80									
His	Ala	Asp	Ser	Asp	Met	Arg	Ala	His	Ser	Leu	Ser	His	Asp	Ser	Gln
				85					90					95	
Thr	Val	Glu	Thr	Arg	Gln	Val	Gly	Leu	Gly	Cys					
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<210> 5447

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5447

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<210> 5448
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 5448
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 Ala Leu His Ser Ala Leu Gly Gly Thr Lys Lys Lys Lys Lys Thr Ile
 35 40 45
 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu
 50 55 60
 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn
 65 70 75 80
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr
 85 90 95
 Leu Asp Leu Pro Thr Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu
 100 105 110
 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly
 115 120 125
 Ile Thr Glu Lys Glu Tyr Lys Thr Tyr Lys Glu Asn Phe Leu Lys Arg
 130 135 140
 Phe Gln Leu Thr Lys Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg
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<210> 5449
 <211> 1359
 <212> DNA
 <213> Homo sapiens

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<210> 5450

<211> 293

<212> PRT

<213> Homo sapiens

<400> 5450

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			20				25						30		
Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser
		35				40					45				
Pro	Ser	Ile	Leu	Asp	His	Leu	Ile	Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro
	50				55					60					
Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	Val	Glu	Met	Gln	Ser	Leu	Gln	Ile

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Val Lys Pro Ser Thr Pro Ser Pro Ser His Glu Ser Ser Ser Ser Ser
      115        120        125
Gly Ser Asp Glu Gly Thr Glu Tyr Tyr Pro His Leu Val Phe Phe Gln
      130        135        140
Asn Lys Ala Arg Arg Glu Asp Phe Cys Pro Arg Lys Leu Arg Gln Met
145          150          155          160
His Leu Met Ile Asp Gln Leu Met Ala His Ser His Leu Arg Tyr Lys
      165        170        175
Gly Thr Leu Ser Met Leu Gln Cys Asn Val Phe Pro Gly Leu Pro Pro
      180        185        190
Asp Phe Leu Asp Ser Glu Val Asn Leu Phe Leu Val Pro Phe Met Asp
      195        200        205
Ser Glu Ala Glu Ser Glu Asn Pro Pro Arg Ala Gly Pro Gly Ser Ser
      210        215        220
Pro Leu Phe Ser Leu Leu Pro Gly Tyr Arg Gly His Pro Ser Phe Gln
225          230          235          240
Ser Leu Val Ser Lys Leu Arg Ser Gln Val Met Ser Met Ala Arg Pro
      245        250        255
Gln Leu Ser His Thr Ile Leu Thr Glu Lys Asn Trp Phe His Tyr Ala
      260        265        270
Ala Arg Ile Trp Asp Gly Val Arg Lys Ser Ser Ala Leu Ala Glu Tyr
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Ser Arg Leu Leu Ala
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<210> 5451

<211> 1184

<212> DNA

<213> Homo sapiens

<400> 5451

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540

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<210> 5452

<211> 206

<212> PRT

<213> Homo sapiens

<400> 5452

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			20					25						30	
Ser	Ser	Pro	Glu	Leu	Ser	Val	Ala	Phe	His	His	Ser	Gly	Pro	Ser	Cys
			35				40						45		
Leu	Ser	Pro	Ala	Leu	Ser	Gln	Thr	Thr	Gln	Lys	Ser	Gly	His	Leu	Trp
			50			55						60			
Ala	Pro	Gly	Met	Val	Thr	Glu	Glu	Lys	His	Ala	Val	Pro	Val	Ser	Pro
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Gly	Phe	Cys	Gln	Lys	Ile	Glu	Gln	Val	Gln	Leu	Thr	His	Cys	Tyr	Cys
			85					90						95	
Arg	Ser	Leu	Lys	Leu	Pro	Gly	Leu	Val	Leu	Asp	Pro	Ser	Arg	Asn	His
			100					105						110	
Gln	Val	Arg	His	Leu	Glu	Pro	Pro	Gly	Glu	Gly	Pro	Pro	Ser	Arg	Ala
			115					120						125	
Leu	Lys	Glu	Leu	His	Glu	Ile	Arg	Asn	Cys	Leu	Met	Lys	Cys	Ile	Ser
			130				135					140			
Leu	Tyr	Leu	Glu	Asp	Glu	Ala	Gln	Thr	Pro	Thr	Pro	Leu	Ser	Pro	Pro
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Gly	Leu	Gly	Met	Ser	Pro	Ala	Ala	Arg	Pro	Arg	Ser	Phe	Pro	Gly	Gly
			165					170						175	
Leu	Gly	Glu	Val	Gly	Ala	Gly	Thr	Ile	Ser	Val	Pro	Ser	Thr	Leu	Thr
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200

205

<210> 5453

<211> 1974

<212> DNA

<213> Homo sapiens

<400> 5453

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 1920
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 1974

<210> 5454

<211> 320

<212> PRT

<213> Homo sapiens

<400> 5454

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Arg	Ile	Asp	Ser	Lys	Ala	Trp	Arg	Glu	Thr	Leu	Thr	Leu	Gln	Lys	Gln	35	40	45	
Leu	Arg	Tyr	Arg	Phe	Pro	Glu	Leu	Ala	Asp	Pro	Asp	Thr	Cys	Tyr	Gly	50	55	60	
Phe	Arg	Phe	Cys	His	Gln	Leu	Asp	Phe	Ser	Thr	Ser	Gly	Ala	Leu	Cys	65	70	75	80
Val	Ala	Leu	Asn	Lys	Ala	Ala	Ala	Gly	Ser	Ala	Tyr	Arg	Cys	Phe	Lys	85	90	95	
Glu	Arg	Arg	Val	Thr	Lys	Ala	Tyr	Leu	Ala	Leu	Leu	Arg	Gly	His	Ile	100	105	110	
Gln	Glu	Ser	Arg	Val	Thr	Ile	Ser	His	Ala	Ile	Gly	Arg	Asn	Ser	Thr	115	120	125	
Glu	Gly	Arg	Ala	His	Thr	Met	Cys	Ile	Glu	Gly	Ser	Gln	Gly	Val	Ala	130	135	140	
Gly	Cys	Glu	Asn	Pro	Lys	Pro	Ser	Leu	Thr	Asp	Leu	Val	Val	Leu	Glu	145	150	155	160
His	Gly	Leu	Tyr	Ala	Gly	Asp	Pro	Val	Ser	Lys	Val	Leu	Leu	Lys	Pro	165	170	175	
Leu	Thr	Gly	Arg	Thr	His	Gln	Leu	Arg	Val	His	Cys	Ser	Ala	Leu	Gly	180	185	190	
His	Pro	Val	Val	Gly	Asp	Leu	Thr	Tyr	Gly	Glu	Val	Ser	Gly	Arg	Glu	195	200	205	
Asp	Arg	Pro	Phe	Arg	Met	Met	Leu	His	Ala	Phe	Tyr	Leu	Arg	Ile	Pro				

210	215	220
Thr Asp Thr Glu Cys Val	Glu Val Cys Thr Pro	Asp Pro Phe Leu Pro
225	230	235
Ser Leu Asp Ala Cys Trp	Ser Pro His Thr Leu	Leu Gln Ser Leu Asp
245	250	255
Gln Leu Val Gln Ala Leu	Arg Ala Thr Pro Asp	Pro Asp Pro Glu Asp
260	265	270
Arg Gly Pro Arg Pro Gly	Ser Pro Ser Ala Leu	Leu Pro Gly Pro Gly
275	280	285
Arg Pro Pro Pro Pro Pro	Thr Lys Pro Pro Glu	Thr Glu Ala Gln Arg
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		320

<210> 5455
 <211> 975
 <212> DNA
 <213> Homo sapiens

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 240
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 780
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<210> 5456
<211> 149
<212> PRT
<213> Homo sapiens

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20 25 30
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35 40 45
His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr
50 55 60
Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala
65 70 75 80
Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe
85 90 95
Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser
100 105 110
Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His
115 120 125
Arg Thr Tyr Asn Pro Gln Ser His Ile Ile Ser Gly Gly Leu Ala Gly
130 135 140
Ala Leu Ala Ala Ala
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<210> 5457
<211> 448
<212> DNA
<213> Homo sapiens

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<210> 5458
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<213> Homo sapiens

<400> 5458

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      20           25           30
Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala
      35           40           45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
      50           55           60
Ser Val Lys Val Met Trp Thr Val Glu Leu Cys Ala Gly His Phe Gln
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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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<210> 5460

<211> 155

<212> PRT

<213> Homo sapiens

<400> 5460

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			20					25					30		
Ser	Glu	Asp	Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His
		35					40					45			
Met	Thr	Ala	Gly	Ala	Met	Ala	Gly	Ile	Leu	Glu	His	Ser	Val	Met	Tyr
	50					55					60				
Pro	Val	Asp	Ser	Val	Lys	Thr	Arg	Met	Gln	Ser	Leu	Ser	Pro	Asp	Pro
65					70				75					80	
Lys	Ala	Gln	Tyr	Thr	Ser	Ile	Tyr	Gly	Ala	Leu	Lys	Lys	Ile	Met	Gln
				85				90					95		
Thr	Glu	Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met
			100					105					110		
Gly	Ala	Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met
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Lys	Arg	Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu
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<210> 5461

<211> 1725

<212> DNA

<213> Homo sapiens

<400> 5461

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1725

<210> 5462
<211> 159
<212> PRT
<213> Homo sapiens

<400> 5462
Met Ser Trp Arg Ile Ser Pro Ala Thr Pro Cys Cys Arg Glu Leu Thr
1 5 10 15
Phe His Leu Cys Ile Phe Cys Leu Glu Thr Ala Tyr Cys Arg Val Gly
20 25 30
Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu Leu Ala Gln Ile Tyr
35 40 45
Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu
50 55 60
Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln Arg Ser Arg Ala Val
65 70 75 80
Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys
85 90 95
Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val Val Asn Pro Trp Gly
100 105 110
Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp
115 120 125
Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln Gln Ile Pro Val Phe
130 135 140
Arg Gln Lys Arg Ser Asp Leu Tyr Ala Val Glu Met Lys Lys Pro
145 150 155

<210> 5463
<211> 792
<212> DNA
<213> Homo sapiens

<400> 5463
nntttttttt ttttttaaag cctggattgt aaccagattt tcttttttcc cccttctcag
60
ctgtagatat gatattctct ttcagggccc cagcttaagg gcaaagtgag ttaatgtgta
120
gacaaaggcg agggacaaga gagagttaac atctagacag tggaaaaagc catgggtgtgt
180
ggtttctggg aaccaccaac acttgcaggt ttagcttttt cccaggggtg actacaagaa
240
agaaaacccat gtttttgcaa gattaaaatg tggttgagtg tgcctaaatt aaccatcccc
300
atttttatca tatttccacc atcacttcag ggttttaaga gtcagtgtct acctgggcgg
360
agctggtagt acattttgct tcttagaaag ctaagtcctg gggtccgtct gatttttaggt
420
tccaggaact tctgagaac acccgatcgc agagggtaat tttctggagt ttgttttgca
480
gggatagctg ggagtatggc caccctgtct cacgatgcgg taatgaatcc agcagaagtg
540

gtgaagcagc gcttgcagat gtacaactcg cagcaccggt cagcaatcag ctgcatccgg
 600
 acggtgtgga ggaccgaggg gttggggggc ttctaccgga gctacaccac gcagctgacc
 660
 atgaacatcc ccttccagtc catccacttc atcacctatg agttcctgca ggagcaggtc
 720
 aacccccacc ggacctacaa cccgcagtcc cacatcatct caggcggggt ggccggggcc
 780
 ctcgccgagg cc
 792

<210> 5464
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 5464
 Phe Ser Gly Val Cys Phe Ala Gly Ile Ala Gly Ser Met Ala Thr Leu
 1 5 10 15
 Leu His Asp Ala Val Met Asn Pro Ala Glu Val Val Lys Gln Arg Leu
 20 25 30
 Gln Met Tyr Asn Ser Gln His Arg Ser Ala Ile Ser Cys Ile Arg Thr
 35 40 45
 Val Trp Arg Thr Glu Gly Leu Gly Ala Phe Tyr Arg Ser Tyr Thr Thr
 50 55 60
 Gln Leu Thr Met Asn Ile Pro Phe Gln Ser Ile His Phe Ile Thr Tyr
 65 70 75 80
 Glu Phe Leu Gln Glu Gln Val Asn Pro His Arg Thr Tyr Asn Pro Gln
 85 90 95
 Ser His Ile Ile Ser Gly Gly Leu Ala Gly Ala Leu Ala Ala Ala
 100 105 110

<210> 5465
 <211> 497
 <212> DNA
 <213> Homo sapiens

<400> 5465
 tttgacggtc ttcagggtta tttcttaaata caattaggaa ataaaaccac agtgcccagg
 60
 aaagttcaca tgagacgcca cgggtgtctct tgccatggcc ccaccactcc agggggccagg
 120
 ggggtgctgct ggagggagga cagacggaca ggcggcctgg gtggccggcc ccagaaaggc
 180
 tggcgtggat gttcgagatg agccaccagc gaagccagta gggatgtctg ggccgtcctg
 240
 gtgggattgt ctgggacatc gccaccaaca cgggtgtcaga gccatcagtg gggacatcgg
 300
 agggggccacc accaggtggg gtatatccaa caggctagaa cccctgaggc ttgagaggcc
 360
 aacccccggc aggagacctc cctgacccc tctgctgcct ctctgtggg accctccagt
 420
 agacacacca gatgaggaca cccaggaggc ctctcccag gacaggaggc agctgcctgg
 480

gcagccacgc agtgcac
497

<210> 5466
<211> 134
<212> PRT
<213> Homo sapiens

<400> 5466
Met Ala Pro Pro Leu Gln Gly Pro Gly Gly Ala Ala Gly Gly Arg Thr
1 5 10 15
Asp Gly Gln Ala Ala Trp Val Ala Gly Pro Arg Lys Ala Gly Val Asp
20 25 30
Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser
35 40 45
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile
50 55 60
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg
65 70 75 80
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro
85 90 95
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro
100 105 110
Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro
115 120 125
Gly Gln Pro Arg Ser Ala
130

<210> 5467
<211> 1329
<212> DNA
<213> Homo sapiens

<400> 5467
gtcgaatatc catgcagccg cgccgccgcc ctggagtgcg ggaagcccag tggaaggggg
60
tcccggggagc cggctgcgat ggacgccgtc ttggaaccct tcccggccga caggctgttc
120
cccggatcca gcttcttgga cttgggggat ctgaacgagt cggacttctt caacaatgcg
180
cactttcttg agcacctgga ccactttacg gagaacatgg aggacttctc caatgacctg
240
ttcagcagct tctttgatga ccctgtgctg gatgagaaga gccctctatt ggacatggaa
300
ctggactccc ctacgccagg catccaggcg gagcacagct actccctgag cggcgactca
360
gcgccccaga gccccttgt gcccatcaag atggaggaca ccaccaaga tgcagagcat
420
ggagcatggg cgctgggaca caaactgtgc tccatcatgg tgaagcagga gcagagcccg
480
gagctgcccg tggaccctct ggetgcccc tggccatgg ctgccgcggc cgccatggcc
540
accacccgc tgctgggcct cagccccttg tccaggctgc ccatcccca ccaggccccg
600

ggagagatga ctcagctgcc agtgatcaaa gcagagcctc tggaggtgaa ccagttcctc
 660
 aaagtacac cggaggacct ggtgcagatg cctccgacgc ccccagcag ccatggcagt
 720
 gacagcgacg gctcccagag tccccgctct ctgccccctt ccagccctgt caggcccatg
 780
 gcgcgctcct ccacggccat ctccagctcc ccactcctca cggctcctca taaattacag
 840
 gggacatcag gccctctggt cctgacagag gaggagaaga ggaccctgat tgctgagggc
 900
 tatcccatcc ccaccaaact cccctcacc aaatcagagg agaaggcctt gaagaaaatt
 960
 cggaggaaga tcaagaataa gatttctgct caggaaagta ggagaaagaa gaaagaatac
 1020
 atggacagcc tggagaaaaa agtggagtct tgttcaactg agaacttgga gcttcggaag
 1080
 aaggtagaga ccctggagaa tgccaacagc ttctccagcg ggatccagcc actcctctgt
 1140
 tccctgattg gcctggagaa tcccacctga cccccaccc caccctctg tctctggctg
 1200
 gggttccttt ctggcccaaa gtaggtccaa gcccttgtag ttatttcgcc acctgctgta
 1260
 cattgtggga actgcaaccc ctacgtgccc gtttgggtgg agagagatta aacatttgcc
 1320
 caccaaaaa
 1329

<210> 5468

<211> 363

<212> PRT

<213> Homo sapiens

<400> 5468

Met	Asp	Ala	Val	Leu	Glu	Pro	Phe	Pro	Ala	Asp	Arg	Leu	Phe	Pro	Gly
1			5					10						15	
Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
			20					25					30		
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
		35					40					45			
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
	50					55					60				
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
65					70				75					80	
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
			85					90					95		
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
			100					105					110		
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
		115					120					125			
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
		130					135				140				
Ser	Ala	Met	Ala	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly
145					150				155					160	
Leu	Ser	Pro	Leu	Ser	Arg	Leu	Pro	Ile	Pro	His	Gln	Ala	Pro	Gly	Glu

				165					170					175			
Met	Thr	Gln	Leu	Pro	Val	Ile	Lys	Ala	Glu	Pro	Leu	Glu	Val	Asn	Gln		
			180					185					190				
Phe	Leu	Lys	Val	Thr	Pro	Glu	Asp	Leu	Val	Gln	Met	Pro	Pro	Thr	Pro		
		195					200					205					
Pro	Ser	Ser	His	Gly	Ser	Asp	Ser	Asp	Gly	Ser	Gln	Ser	Pro	Arg	Ser		
	210					215					220						
Leu	Pro	Pro	Ser	Ser	Pro	Val	Arg	Pro	Met	Ala	Arg	Ser	Ser	Thr	Ala		
225					230				235						240		
Ile	Ser	Ser	Ser	Pro	Leu	Leu	Thr	Ala	Pro	His	Lys	Leu	Gln	Gly	Thr		
			245					250					255				
Ser	Gly	Pro	Leu	Val	Leu	Thr	Glu	Glu	Glu	Lys	Arg	Thr	Leu	Ile	Ala		
		260						265					270				
Glu	Gly	Tyr	Pro	Ile	Pro	Thr	Lys	Leu	Pro	Leu	Thr	Lys	Ser	Glu	Glu		
	275						280					285					
Lys	Ala	Leu	Lys	Lys	Ile	Arg	Arg	Lys	Ile	Lys	Asn	Lys	Ile	Ser	Ala		
	290					295					300						
Gln	Glu	Ser	Arg	Arg	Lys	Lys	Lys	Glu	Tyr	Met	Asp	Ser	Leu	Glu	Lys		
305					310				315						320		
Lys	Val	Glu	Ser	Cys	Ser	Thr	Glu	Asn	Leu	Glu	Leu	Arg	Lys	Lys	Val		
			325					330					335				
Glu	Thr	Leu	Glu	Asn	Ala	Asn	Ser	Phe	Ser	Ser	Gly	Ile	Gln	Pro	Leu		
		340						345					350				
Leu	Cys	Ser	Leu	Ile	Gly	Leu	Glu	Asn	Pro	Thr							
		355						360									

<210> 5469

<211> 1292

<212> DNA

<213> Homo sapiens

<400> 5469

nncgcggccg cgtcgacgga aggggaggac gtgggatggt ggcggagctg gctgcagcag
60

agctaccaag cagtcaaaga gaagtcctct gaagccttgg agtttatgaa gcgggacctg
120

acggagttaa cccaggtggt gcagcatgac acggcctgta ccatcgacgc cacggccagc
180

gtggtcaagg agaagctggc tacggaaggc tcctcaggag caacagagaa gatgaagaaa
240

gggttatctg acttcctagg ggtgatctca gacacctttg ccccttcgcc agacaaaacc
300

atcgactgcg atgtcatcac cctgatgggc acaccgtctg gcacagctga gccctatgat
360

ggcaccaagg ctgcctcta tagcctgcag tcggacccag caacctactg taatgaacca
420

gatgggcccc cggaattggt tgacgcctgg ctttcccagt tctgcttgga ggagaagaag
480

ggggagatct cagagctcct tgtaggcagc cctccatcc gggccctcta caccaagatg
540

gttccagcag ctgtttccca ttcagaattc tggcatcggt atttctataa agtccatcag
600

ttagagcagg agcaggcccc gagggacgcc ctgaagcagc gggcggaaca gagcatctct
660

gaagagcccg gctgggagga ggaggaagag gagctcatgg gcatttcacc catatctcca
 720
 aaagaggcaa aggttcctgt ggccaaaatt tctacattcc ctgaaggaga acctggcccc
 780
 cagagcccct gtgaagagaa tctggtgact tcagttgagc cccagcaga ggtgactcca
 840
 tcagagagca gtgagagcat ctccctcgtg acacagatcg ccaacccggc cactgcacct
 900
 gaggcacgag tgctacccaa ggacctgtcc caaaagctgc tagaggcatc cttggaggaa
 960
 cagggcctgg ctgtggatgt gggtgagact ggaccctcac cccctattca ctccaagccc
 1020
 ctaacgcctg ctggccacac cggcggccca gagcccaggc ctccagccag agtagagact
 1080
 ctgagggagg aggcgcccac agacttacgg gtgtttgagc tgaactcgga tagtgggaag
 1140
 tctacaccct ccaacaatgg aaagaaaggc tcaagcacgg acatcagtga ggactgggag
 1200
 aaagactttg acttggacat gactgaagag gaggtgcaga tggcactttc caaagtggat
 1260
 gcctccgggg agctgaagat gtagaggggg aa
 1292

<210> 5470

<211> 427

<212> PRT

<213> Homo sapiens

<400> 5470

Xaa	Ala	Ala	Ala	Ser	Thr	Glu	Gly	Glu	Asp	Val	Gly	Trp	Trp	Arg	Ser
1				5					10					15	
Trp	Leu	Gln	Gln	Ser	Tyr	Gln	Ala	Val	Lys	Glu	Lys	Ser	Ser	Glu	Ala
			20					25					30		
Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
		35					40					45			
His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
	50					55					60				
Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
65				70					75					80	
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
			85					90					95		
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
		100						105					110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
	115						120					125			
Leu	Gln	Ser	Asp	Pro	Ala	Thr	Tyr	Cys	Asn	Glu	Pro	Asp	Gly	Pro	Pro
	130					135					140				
Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
145				150					155					160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
			165					170					175		
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
		180						185					190		
Arg	Tyr	Phe	Tyr	Lys	Val	His	Gln	Leu	Glu	Gln	Glu	Gln	Ala	Arg	Arg

195	200	205
Asp Ala Leu Lys Gln Arg	Ala Glu Gln Ser Ile	Ser Glu Glu Pro Gly
210	215	220
Trp Glu Glu Glu Glu Glu	Glu Leu Met Gly Ile	Ser Pro Ile Ser Pro
225	230	235
Lys Glu Ala Lys Val Pro	Val Ala Lys Ile Ser	Thr Phe Pro Glu Gly
245	250	255
Glu Pro Gly Pro Gln Ser	Pro Cys Glu Glu Asn	Leu Val Thr Ser Val
260	265	270
Glu Pro Pro Ala Glu Val	Thr Pro Ser Glu Ser	Ser Glu Ser Ile Ser
275	280	285
Leu Val Thr Gln Ile Ala	Asn Pro Ala Thr Ala	Pro Glu Ala Arg Val
290	295	300
Leu Pro Lys Asp Leu Ser	Gln Lys Leu Leu Glu	Ala Ser Leu Glu Glu
305	310	315
Gln Gly Leu Ala Val Asp	Val Gly Glu Thr Gly	Pro Ser Pro Pro Ile
325	330	335
His Ser Lys Pro Leu Thr	Pro Ala Gly His Thr	Gly Gly Pro Glu Pro
340	345	350
Arg Pro Pro Ala Arg Val	Glu Thr Leu Arg Glu	Glu Ala Pro Thr Asp
355	360	365
Leu Arg Val Phe Glu Leu	Asn Ser Asp Ser Gly	Lys Ser Thr Pro Ser
370	375	380
Asn Asn Gly Lys Lys Gly	Ser Ser Thr Asp Ile	Ser Glu Asp Trp Glu
385	390	395
Lys Asp Phe Asp Leu Asp	Met Thr Glu Glu Glu	Val Gln Met Ala Leu
405	410	415
Ser Lys Val Asp Ala Ser	Gly Glu Leu Lys Met	
420	425	

<210> 5471

<211> 534

<212> DNA

<213> Homo sapiens

<400> 5471

cggccgcccc gcgggggagc agaaatagga ccgtcctggc agaggctgca gccgacccag
 60
 ctggccccac tacgcggggc ccagagccag ggtgggggat gcagagaccg ggcgtgcggg
 120
 ttgccagggtg tggcgacacat gtgtgcccgt gggcagagta cagagacaca agcttgtgtg
 180
 gacacgaatg ttagcttatg tgcgagtgca cacggagtgg tgagtgcagg gaccccaggc
 240
 cggcctgcgt cgggtgcgcag ggcataatagg ggcgtgcacg cagtcttgga ggtgtgtgca
 300
 cagagcccc ggcacccgcg tgtgtgcaaa gacacaggaa cccgtctgcg tggcgctgtg
 360
 tgtgcaaccc aaggaggtgg gcgcttgac tccaaagtgt gcgcttatcc ggatgtggat
 420
 gtgggggacag ccggggacag ggctgggtgt gcgtgactcg ggtgtgccgg gacccacaga
 480
 gcatatgtgt ccatgcctgg tgctgtgact catgtccctg ggggtgggcac gcgt
 534

<210> 5472
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 5472
 Met Leu Cys Gly Ser Arg His Thr Arg Val Thr His Thr Gln Pro Cys
 1 5 10 15
 Pro Arg Leu Pro Pro His Pro His Pro Asp Lys Arg Thr Leu Trp Ser
 20 25 30
 Pro Ser Ala His Leu Leu Gly Leu His Thr Gln Arg His Ala Asp Gly
 35 40 45
 Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr
 50 55 60
 Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln
 65 70 75 80
 Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile
 85 90 95
 Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His
 100 105 110
 Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys
 115 120 125
 Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser
 130 135 140
 Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala
 145 150 155 160
 Ala

<210> 5473
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 5473
 gcgaccagca gcgctggtgg ccatgctctt ggacactacg gcctggcggg cagccctcgc
 60
 cgctgccgcg ccccgcgccc ccaggaggcc gcaccctgcg ccagggcccg gagacagcaa
 120
 catcttcttg ggctgcagg agacctgaca gatgccaaaa caaaggaaca gttgggatcc
 180
 aggcagcatg aggtagaatg gcaaacctac cagggtattc tgaagaagac aagagtcatg
 240
 gaaaaaacca agtggctgga tatcaaagga aatcatgaaa aagatggagg agctcttatt
 300
 actggccaag gaaagcagtc ggagcaacca tacaatttgg tttggacact ttacaacatc
 360
 cactattctt tctccatcac caggaatccg gtcaataatg agttcggcta tagcttattt
 420
 gtgtggacat ctccatacac ttggtggact gatgcctggt ttgcacactc gtcacttcca
 480
 gggcactttg gaacttgagg tgggagactg gaaggataat aggaggtacc ggatttttgc
 540

ttttgatcac gacctcttta gctttgcaga tttgatcttt gggaagtggc ctgtggttct
 600
 tatcaccaat cctaaatcac tcctttatag ttgtggtgaa catgaaccac tagaaagact
 660
 tcttcactca acccacatta gattggtaac a
 691

<210> 5474
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 5474
 Met Lys Lys Met Glu Glu Leu Leu Leu Leu Ala Lys Glu Ser Ser Arg
 1 5 10 15
 Ser Asn His Thr Ile Trp Phe Gly His Phe Thr Thr Ser Thr Ile Leu
 20 25 30
 Ser Pro Ser Pro Gly Ile Arg Ser Ile Met Ser Ser Ala Ile Ala Tyr
 35 40 45
 Leu Cys Gly His Leu His Thr Leu Gly Gly Leu Met Pro Val Leu His
 50 55 60
 Thr Arg His Phe Gln Gly Thr Leu Glu Leu Glu Val Gly Asp Trp Lys
 65 70 75 80
 Asp Asn Arg Arg Tyr Arg Ile Phe Ala Phe Asp His Asp Leu Phe Ser
 85 90 95
 Phe Ala Asp Leu Ile Phe Gly Lys Trp Pro Val Val Leu Ile Thr Asn
 100 105 110
 Pro Lys Ser Leu Leu Tyr Ser Cys Gly Glu His Glu Pro Leu Glu Arg
 115 120 125
 Leu Leu His Ser Thr His Ile Arg Leu Val Thr
 130 135

<210> 5475
 <211> 628
 <212> DNA
 <213> Homo sapiens

<400> 5475
 ggcacacacg aaacagcctt cctgggaccc aaggacctgt tcccctacga caaatgtaaa
 60
 gacaagtacg ggaagcccaa caagaggaaa ggcttcaatg aagggctgtg ggagatccag
 120
 aacaaccccc acgccagcta cagcgccccct ccgccagtga gctcctccga cagcgaggcc
 180
 cccgaggcca accccgccga cggcagtgac gctgacgagg acgatgagga ccgggggggtc
 240
 atggccgtca cagcggtaac cgccacagct gccagcgaca ggatggagag cgactcagac
 300
 tcagacaaga gtagcgacaa cagtggcctg aagaggaaga cgcctgcgct aaagatgtcg
 360
 gtctcgaaac gagcccgaaa ggcctccagc gacctggatc aggccagcgt gtccccatcc
 420
 gaagaggaga actcggaaag ctcatctgag tcggagaaga ccagcgacca ggacttcaca
 480

cctgagaaga aagcagcggg cccgggcgcca cggagggggcc ctctggggggg acggaaaaaa
540
aagaaggcgc cgtcagcctc cgactccgac tccaaggccg attcggacgg ggccaagcct
600
gagccggtgg ccatggcgcg gtcggcgt
628

<210> 5476
<211> 209
<212> PRT
<213> Homo sapiens

<400> 5476
Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro Tyr
1 5 10 15
Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe
20 25 30
Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser
35 40 45
Ala Pro Pro Pro Val Ser Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn
50 55 60
Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val
65 70 75 80
Met Ala Val Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu
85 90 95
Ser Asp Ser Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg
100 105 110
Lys Thr Pro Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala
115 120 125
Ser Ser Asp Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn
130 135 140
Ser Glu Ser Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr
145 150 155 160
Pro Glu Lys Lys Ala Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly
165 170 175
Gly Arg Lys Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys
180 185 190
Ala Asp Ser Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser
195 200 205
Ala

<210> 5477
<211> 727
<212> DNA
<213> Homo sapiens

<400> 5477
ttttttgtta gtgtttcctt tattataaag cactgaaata agttaataa acaggtggga
60
ggctgggcag tccccagcc ggtttgtcca cagcccctgg gggcagtga ggtgaatata
120
gggcccttct cactgagctc gtgaagtgcc tcagtcaagg caaggtcccc tgggtccatat
180

gggccccccc gcccatgggg ttgggctggt ccttatagtg cctacgttag tctgtgtgga
 240
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 <212> PRT
 <213> Homo sapiens

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 Lys Thr Trp Pro Leu Thr Cys Arg Pro Pro Thr Gln Leu Ala Gly Trp
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<211> 251

<212> PRT

<213> Homo sapiens

<400> 5480

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		20					25					30			
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

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 Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Glu Gln Glu
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 85 90 95
 Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Gln Glu
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 Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg
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 Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly
 195 200 205
 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro
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<210> 5481
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 <212> DNA
 <213> Homo sapiens

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<210> 5482

<211> 188

<212> PRT

<213> Homo sapiens

<400> 5482

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			20					25					30		
Leu	Arg	Asn	Pro	Ser	Ala	Ala	Phe	Phe	Cys	Val	Ala	Arg	Leu	Gln	Asp
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	50					55					60				
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65					70					75				80	
Gly	Val	Val	Trp	Lys	Met	Asn	Lys	Ser	Asn	Leu	Asn	Ser	Leu	Asp	Glu
				85					90					95	
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
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<210> 5483

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 5483

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1140

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<210> 5484

<211> 357

<212> PRT

<213> Homo sapiens

<400> 5484

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			20					25					30		
Ile	Asp	Ile	Ile	Asn	Leu	Asp	Thr	Phe	Thr	Tyr	Ile	Glu	Ser	Ala	Ser
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Leu	Ser	Pro	Glu	Gln	Lys	Ala	Arg	Arg	Leu	Asp	Pro	Thr	Glu	Pro	Ile
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Arg	Thr	Pro	Ile	Ile	Ala	Gly	Gly	Leu	Phe	Val	Ile	Asp	Lys	Ala	Trp
				85					90					95	
Phe	Asp	Tyr	Leu	Gly	Lys	Tyr	Asp	Met	Asp	Met	Asp	Ile	Trp	Gly	Gly
			100					105					110		
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Glu	Ile	Val	Pro	Cys	Ser	Arg	Val	Gly	His	Val	Phe	Arg	Lys	Lys	His
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Lys	Arg	Thr	Ala	Glu	Val	Trp	Met	Asp	Glu	Tyr	Lys	Gln	Tyr	Tyr	Tyr
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Ala	Ala	Arg	Pro	Phe	Ala	Leu	Glu	Arg	Pro	Phe	Gly	Asn	Val	Glu	Ser
			180					185					190		
Arg	Leu	Asp	Leu	Arg	Lys	Asn	Leu	Arg	Cys	Gln	Ser	Phe	Lys	Trp	Tyr
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			260					265					270				
Gln	Lys	Ile	Leu	Gln	Glu	Glu	Leu	Cys	Leu	Ser	Val	Ile	Thr	Leu	Phe		
		275					280					285					
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Leu	Cys	Leu	Asp	Thr	Asp	Met	Phe	Gly	Asp	Gly	Thr	Glu	Asn	Gly	Lys		
			325					330					335				
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<210> 5485

<211> 1549

<212> DNA

<213> Homo sapiens

<400> 5485

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<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

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Arg	Ser	Arg	Ser	Arg	Ser	Phe	Ser	Arg	Ser	Ser	Arg	Ser	His	Ser	Arg
		35				40					45				
Val	Ser	Ser	Arg	Phe	Ser	Ser	Arg	Ser	Arg	Arg	Ser	Lys	Ser	Arg	Ser
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Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
			85					90						95	
Arg	Tyr	Gly	Phe	Thr	Arg	Arg	Tyr	Tyr	Arg	Ser	Pro	Ser	Arg	Tyr	Arg
			100					105					110		
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Thr	Val	Tyr	Pro	Glu	Glu	His	Ser	Arg	Trp	Arg	Asp	Arg	Ser	Arg	Thr
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	195					200						205			
Glu	Thr	Ser	Arg	Gly	Ile	Gly	Val	Ser	Ser	Asn	Gly	Ala	Lys	Pro	Glu
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Leu	Ser	Glu	Lys	Val	Thr	Glu	Asp	Gly	Thr	Arg	Asn	Pro	Asn	Glu	Lys

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Pro	Thr	Gln	Gln	Arg	Ser	Ile	Ala	Phe	Ser	Ser	Asn	Asn	Ser	Val	Ala
				245					250					255	
Lys	Pro	Ile	Gln	Lys	Ser	Ala	Lys	Ala	Ala	Thr	Glu	Glu	Ala	Ser	Ser
			260					265						270	
Arg	Ser	Pro	Lys	Ile	Asp	Gln	Lys	Lys	Ser	Pro	Tyr	Gly	Leu	Trp	Ile
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<210> 5487

<211> 1716

<212> DNA

<213> Homo sapiens

<400> 5487

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<212> DNA

<213> Homo sapiens

<400> 5489

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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 Thr Thr Phe Ser Thr Thr Ser Gly Tyr Met Glu Gly Tyr Tyr Thr Phe
 245 250 255
 His Phe Leu Tyr Phe Lys Asp Lys Ile Phe Asn Val Ala Ile Pro Arg

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<400> 5497
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120
tgactatggg tggactcggg tgtagacctc tgaagctgag atcacacgaa aacctggcct
180
ccccgccatg tagctgttgg agagtagaaa aatagagcac gcctgatgtt tctaaatgag
240
aagactttca atagtaatga agaatccatg gcactctcct caccctcaaa cacatggcag
300
tcattcacat acaggcccca aagtcactgt tagtgctgca gtggctcctg tggacattgg
360
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420
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480
gcttggggtt ctggactttt ctgaggcacc ggcagagggg tctcgttgct cccttgagtg
540
taggggcagc cctttaacct ggctccttga gtccctgctt tttctgcttc tgttgccctc
600
ttcctcgtct tcctctctct caatatctcc ctctctttgt ccctccccag ttctgacct
660
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720
tggcacagag tggggctcag ttagagtatg tgggatgttg gtttcgccag gtgagtgaat
780
gaaaggactc gaccaccaca gctgagccac tagctgggcc atgcgaagag ttctaggtgc
840
aaaggctgga gggtggaatt catttttgag aggtgtgtga gcagcttccg acccctgccc
900
catttgaacg ggggccttgc tggtcgcgtc cctgcattca cccgcgcggc catcccgtca
960
tccaacagtt gatcctaact gagcacgccc acggccctgg tctggcctgg gcaccggcga
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1056

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<210> 5498
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 5498
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 His Pro Pro Ala Phe Ala Pro Arg Thr Leu Arg Met Ala Gln Leu Val
 20 25 30
 Ala Gln Leu Trp Trp Ser Ser Pro Phe Ile His Ser Pro Gly Glu Thr
 35 40 45
 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys
 50 55 60
 Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met
 65 70 75 80
 Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg
 85 90 95
 Glu Glu Asp Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser
 100 105 110
 Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp
 115 120 125
 Pro Ser Ala Gly Ala Ser Glu Lys Ser Arg Asn Pro Ser Arg Met Gly
 130 135 140
 Thr Trp Gly Val Asn Phe
 145 150

<210> 5499
 <211> 1918
 <212> DNA
 <213> Homo sapiens

<400> 5499
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 tgcctctgcc cttegtagat tctctgctgg gcctttggaa ctaacacagc aacttccagg
 180
 gtctcatgtt gaagacttta tggagcatcc tggccagaac aagccaagga gccaagacga
 240
 gagggacaca cggacaaaca acagacagaa gacgtactgg ccgctggact ccgctgcctc
 300
 ccccatctcc ccgccatctg cgcccggagg atgagcccag ccttcagggc catggatgtg
 360
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 420
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 480
 ttctacgaga cctccctgct tgagatgcgc aaattcactc ccagtagaaa aggtgtggta
 540
 tctgtgcgct ttgaagaaga tgaagacagg aacttgtgtc taatagcata tccattgaaa
 600

ggggaccatg gaattgtgga cattgcacat aattcagact gtgaaccaa aagtaagctc
660
ctaaggtgga caacaaacaa aaaacatcat gtcttagaaa cagaaaagac ccctaaggac
720
tgggtgcgtc agcaccgtaa agaggagaaa atgaagagcc ataagttaga agaagaattt
780
gagtggctaa agaaatctga agtcttgtag tacactgtag agaagaaggg gaatataagt
840
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900
atgaaggaga atgcaaagca tcggaaccag taaaaattta tcttactgga aaacctgact
960
tcccgtatg aggtgccttg tgccttgac ctcaagatgg gcacacgaca acatggtgat
1020
gatgcttcag aggagaaggc agccaaccag atccgaaaat gtcagcagag cacatctgca
1080
gtcattggtg tgnctgtgtg tggcatgcag gtgtaccaag caggcagtgg gcagctcatg
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1200
cagttcttcc acaatgggcg gtacctgcgc cgtgaactcc tgggccctgt gctcaagaag
1260
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1380
gatttggagg acctgtcaga ggaatcagct gatgagtctg ctgggtgccta tgcctacaaa
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1500
ctgtatggcg aggacaccgt ggtgcatgag ggccaggatg ctggctatat cttcgggctc
1560
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1620
ctgctccagt acttgagagc gactctgtgt cccaggcaca gctgtgctgc gtcaggagg
1680
aagccagtat ggccagggtg tggctcctgc agcctggagc tgatgtgcag tggcctctgt
1740
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1800
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1860
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1918

<210> 5500

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5500

Met	Ser	Pro	Ala	Phe	Arg	Ala	Met	Asp	Val	Glu	Pro	Arg	Ala	Lys	Gly
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Val	Leu	Leu	Glu	Pro	Phe	Val	His	Gln	Val	Gly	Gly	His	Ser	Cys	Val

<210> 5501
<211> 568

<212> DNA

<213> Homo sapiens

<400> 5501

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 120
 tgaagcgggg acaaaaccat gcagctcaga ggtccctgtg ggggctgggg gagctgccct
 180
 gcaggtcttg gcacatgcac agcaggctcc ccatagcttt gtcaccacaa agggcactgt
 240
 tctattcaca gcacctcctg cttctgctg gcaactgtgt ctccctgtgc tatatttaat
 300
 tccaccagca aagctggcga ggcaggggccc agccctgaag gagatctcct tgccctgaccc
 360
 ctggacctgg aaatggaggc ttcattgtgcc cgccttggcg gcttaagcct gctgctttgg
 420
 cagtgccatg ggtgagccga gcagctgtga ggtgggtggg gcagggtgt agcccacgcc
 480
 ggggtgctatt ccaggctcta ggggctgggtg ctcaccccca ccccagcga ctcccgctct
 540
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 568

<210> 5502

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5502

Met	Ile	Leu	Gly	Lys	Arg	Leu	His	Leu	Asn	Phe	Arg	Tyr	Phe	Thr	Cys
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Glu	Ala	Gly	Thr	Lys	Pro	Cys	Ser	Ser	Glu	Val	Pro	Val	Gly	Ala	Gly
			20					25					30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
		35					40					45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
	50					55				60					
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65					70				75					80	
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
			85					90						95	
Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
			100					105					110		

<210> 5503

<211> 1679

<212> DNA

<213> Homo sapiens

<400> 5503

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120
atttaatcct cacaatagtc aagctaggaa ggtaagtgtg gaattattac cccatttgat
180
aggtagacaa attaaagctt aagatcaaac cgtttgcaaa gcaggaagca gcacttcctc
240
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300
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360
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420
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cagactcagg ggaagattg ttccctccca gtgggagagg tgaagatagg aaagaggtcc
600
tattctccag cccccgggaa gcagaaaaag cctaattgcca tgggtctggc cccaacatca
660
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720
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780
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gaattgcaga gtgagcgctc agcggtagcc tgggtgtggt tccagaatcg ccgggccaag
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1260
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1380
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1560
agaggggttaa ctgagaggag cacagagtgg tacaggagat ggggatgaaa gggataaggg
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1679

<210> 5504
<211> 392
<212> PRT
<213> Homo sapiens

<400> 5504
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Leu Pro Pro Ser Cys Thr Ile Ser Gly Glu Lys Lys Pro Pro Ala Val
35 40 45
Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
50 55 60
Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
65 70 75 80
Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
85 90 95
Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
100 105 110
Ala Met Gly Leu Ala Pro Thr Ser Ser Pro Gly Ala Pro Asn Ser Ala
115 120 125
Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
130 135 140
His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
145 150 155 160
Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
165 170 175
Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
180 185 190
Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
195 200 205
Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
210 215 220
Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
225 230 235 240
Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
245 250 255
Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
260 265 270
Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
275 280 285
Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
290 295 300
Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
305 310 315 320
Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
325 330 335
Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
340 345 350
Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
355 360 365
Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

370 375 380
Pro Cys Gly Ser Trp Gly Thr Arg
385 390

<210> 5505
<211> 1099
<212> DNA
<213> Homo sapiens

<400> 5505
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gagctgttca cgcacgtgcc cgcgcgccag ctgctgctga actgccgcct ggtctgcagc
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420
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720
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780
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1080
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1099

<210> 5506
<211> 280
<212> PRT
<213> Homo sapiens

<400> 5506

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 Glu Leu Pro Glu Asn Ile Leu Leu Glu Leu Phe Thr His Val Pro Ala
 35 40 45
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp
 50 55 60
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly
 65 70 75 80
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe
 85 90 95
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala
 100 105 110
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu
 115 120 125
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn
 130 135 140
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys
 145 150 155 160
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu
 165 170 175
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg
 180 185 190
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala
 195 200 205
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln
 210 215 220
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn
 225 230 235 240
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp
 245 250 255
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser
 260 265 270
 Ile Thr Ile Gly Pro Pro Leu Pro
 275 280

<210> 5507

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 5507

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 120
 aagcaatttc tcacctttga caaacaggtc cttecgattct atgcaatctg ggatgataca
 180
 gacagcatgt atggtgaatg tcggacctac atcattcatt actatcttat ggatgatacg
 240
 gtggaaattc gagaggtcca cgaacggaat gatgggagag atcctttccc actcctaattg
 300

aaccgccagc gtgtgccc aa agttttggtg gaaaatgcaa agaacttccc tcagtgtgtg
360
ctagaaatct ctgaccaaga agtggttgaa tggatactg ctaaagactt cattgttggg
420
aagtcactca ctatccttgg gagaacttcc ttcatttatg attgtgatcc atttactcga
480
cggattaca aagagaagtt tggaaactc gatttaccac gtattgatgt gagcaagcgg
540
gaaccacctc cagtaaaaca ggagttgcct ccttataacg gttttggact agtggaagat
600
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660
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720
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1658

<210> 5508

<211> 448

<212> PRT

<213> Homo sapiens

<400> 5508

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20	25	30	
Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
35	40	45	
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
50	55	60	
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
65	70	75	80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
100	105	110	
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
115	120	125	
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
130	135	140	
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
145	150	155	160
Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
165	170	175	
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
210	215	220	
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
225	230	235	240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
245	250	255	
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
260	265	270	
Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
305	310	315	320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
325	330	335	
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
340	345	350	
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys			
370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
385	390	395	400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
420	425	430	
Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe Ser Asn			

435

440

445

<210> 5509
 <211> 818
 <212> DNA
 <213> Homo sapiens

<400> 5509
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 120
 ctatgtgaga ggaagtaagt atacacagcg taagagggtg gataaccaag tcatagaaga
 180
 aatgttttga gaacatggaa tcatgtgaac ttattatgtg gtaagtacag ataccaggg
 240
 ctgtcagtct caccatcctt ttctacacat gtggatgctt caggactcca gcctttgagg
 300
 atgtggcttt caacttcacc ctacaggaaa ggtagtcaat gtggagaagc cttcagccag
 360
 attccagggtc ataatctgaa taagaaaacg cctcctggag taaagccacc tgaaagccat
 420
 gtgtgtggag aggtcggcgt gggctatcca tccactgaaa ggcacatcag agatcgcctt
 480
 ggacgcaaac cctgtgaata tcaggaatgt agacagaagg catatacatg taagccatgt
 540
 gggaatgcct ttcgttttca ccactccttt cacatacacg aaaggcctca cagtggagaa
 600
 aacctctatg aatgttagga atttcagaaa acattcactt ccccccaaa cttcaaaga
 660
 tgtgaaaatg catagtggag atggacctta caaatgcaag gtgggtagga aaacctttga
 720
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 780
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 818

<210> 5510
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 5510
 Met Trp Leu Ser Thr Ser Pro Tyr Arg Lys Gly Ser Gln Cys Gly Glu
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 Ala Phe Ser Gln Ile Pro Gly His Asn Leu Asn Lys Lys Thr Pro Pro
 20 25 30
 Gly Val Lys Pro Pro Glu Ser His Val Cys Gly Glu Val Gly Val Gly
 35 40 45
 Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro
 50 55 60
 Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys
 65 70 75 80
 Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro

85 90 95
 His Ser Gly Glu Asn Leu Tyr Glu Cys
 100 105

<210> 5511
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 5511
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 120
 ctctgctgag ttgctgagag tctgtgttcc tctctccact tataggatgg gtcctcatct
 180
 tcttgagctt caagcccca ggcagagacc tggctgctcc tcatgggagc ctcagggata
 240
 atgctgaatt cctctatggc agagatggga ggagaggctc cacgctgggc ctcctcagcc
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 ggtcccggcg ccggccgcn
 379

<210> 5512
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 5512
 Met Glu Ala Glu Glu Ala Gln Arg Gly Ala Ser Pro Pro Ile Ser Ala
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 20 25 30
 Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr
 35 40 45
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu
 50 55 60
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys
 65 70 75 80
 Glu Gly Ser Ala Asp Val Glu Pro Asn Gln Glu Ser Leu Val Ala Glu
 85 90 95
 Ala Cys Asp Thr Pro
 100

<210> 5513
 <211> 837
 <212> DNA
 <213> Homo sapiens

<400> 5513
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120
agactcgggg agccattgac catcgtctct gaggatggag actggtggac ggtgctgtct
180
gaagtctcag gcagagagta taacatcccc agcgtccacg tggccaaagt ctcccatggg
240
tggtgtatg agggcctgag caggagagaa gcagaggacc tgctgttgtt acctgggaac
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360
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420
gacaatggct ggctgtacat ctcaccgcgc ctcaccttcc cctcactcca ggccctgggtg
480
gaccattact ctgagctggc ggatgacatc tgctgcctac tcaaggagcc ctgtgtcctg
540
cagagggctg gcccgctccc tggcaaggat atacccttac ctgtgactgt gcagaggaca
600
ccactcaact ggaaagagct ggacagctcc ctctgtttt ctgaagctgc cacaggggag
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gagtctcttc tcagtggagg tctccgggag tccctcagct tctacatcag cctgaatgac
720
gaggctgtct ctttggatga tgcctaggcc caaaggagag gccaaaaggg aaaccaaggc
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837

<210> 5514

<211> 248

<212> PRT

<213> Homo sapiens

<400> 5514

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Ala	Glu	Arg	Ser	Lys	Ala	Thr	Ala	Ala	Ala	Leu	Gly	Ser	Phe	Pro	Ala
			20					25					30		
Gly	Gly	Pro	Ala	Glu	Leu	Ser	Leu	Arg	Leu	Gly	Glu	Pro	Leu	Thr	Ile
		35					40					45			
Val	Ser	Glu	Asp	Gly	Asp	Trp	Trp	Thr	Val	Leu	Ser	Glu	Val	Ser	Gly
	50					55					60				
Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
65					70					75					80
Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
			85						90					95	
Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
		100						105					110		
Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
		115				120						125			
Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
	130					135					140				
Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145					150					155					160
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

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                165                170                175
Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
                180                185                190
Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
                195                200                205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
                210                215                220
Ser Glu Gly Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp
225                230                235                240
Glu Ala Val Ser Leu Asp Asp Ala
                245

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<210> 5515
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<400> 5515
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120
aagcttcagc tacaagccct tgagcaagag cacaagaagc tggctgcccg ccttgaggaa
180
gagcgtggca agaacaagca ggtggctcctg atgctgggtca aagagtgcaa gcagctctca
240
agcaaagtca tagaggaggg ccagaagctc gaagacgtaa tggccaaact ggcttcttct
300
ctttgtcacc agcacctgct tcatagtctc tctggagtgc caggaacggg tcatatagat
360
taaattctccc ataccgttcc tggataaata cctccttctt gcgagcccgc agggcctcga
420

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<210> 5516
 <211> 120
 <212> PRT
 <213> Homo sapiens

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<400> 5516
Val Cys Thr Asn Pro Leu Ser Ile Leu Glu Ala Val Met Ala His Cys
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Lys Lys Met Gln Glu Arg Met Ser Ala Gln Leu Ala Ala Glu Ser
20          25          30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Gln Ala Leu Glu
35          40          45
Gln Glu His Lys Lys Leu Ala Ala Arg Leu Glu Glu Glu Arg Gly Lys
50          55          60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65          70          75          80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85          90          95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
100         105         110
Val Pro Gly Thr Gly His Ile Asp

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115

120

<210> 5517
 <211> 804
 <212> DNA
 <213> Homo sapiens

<400> 5517
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 180
 caaccaacac atggtgacat ggtgattgtg ccaacttggt gctcagttat atgcagggcc
 240
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 300
 gagctagtag aatttgagtc tccagggaaa gagctacttg accaaattaa actagtagca
 360
 ggtagagcat gaatgacagc atattatacc atcaagatgt tcttagagca gtgtatggat
 420
 ggatcgattg tactgccatc agttgtgact gacgttggtat tcaaggagaa agagaaactt
 480
 gtttagaaaag cactttgaaa gttttttgag tacgggggtg ccctgtatca ccccgttatg
 540
 gttgaacttt ctccttcaaa attaccagac ttggcagcag tggcaaatta ttgggctaaa
 600
 agacttaatc agacatatcc tgggttcaag gtcctaata taatacctgg tgcaaacatt
 660
 atacttccac tcattcagat ggttgcaccc tgccaggcat ccagtgggac tgggaatatg
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 780
 tcagttctct atattaaaaa aaaa
 804

<210> 5518
 <211> 85
 <212> PRT
 <213> Homo sapiens

<400> 5518
 Xaa Val Trp Pro Lys His Lys Gly Lys Asp Pro Gln Phe Thr Phe Leu
 1 5 10 15
 Glu Leu Ser Ser Val Leu Tyr Cys Cys Asp Leu Leu Ile Gly Ile Gly
 20 25 30
 Ile Val Val Gly Ser Ser Asp Arg Ile Arg Ala Ser Ser Leu Gln Val
 35 40 45
 Gln Lys Gln Phe Lys Thr Leu Met Ile Ala Leu Gln Gln Pro Thr His
 50 55 60
 Gly Asp Met Val Ile Val Pro Thr Cys Cys Ser Val Ile Cys Arg Ala
 65 70 75 80
 Ser Asp Trp Phe Lys

85

<210> 5519
<211> 401
<212> DNA
<213> Homo sapiens

<400> 5519
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tccttcgcat aacttgtaca ggggtaggta gcataaaaga cagccggtct caagaagcaa
120
ccatgcgcct cactacttac catgttcctg cgggcattcc cctcccgaag ggagtctctg
180
aaaacaaaca cacacagaag ttggcgctgg gcaccacatt ctctcttga cctaaccatc
240
aggaatttgc tgtgccatct gttcataaaa cttagccagg cccagaaagc ttgtcccaac
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401

<210> 5520
<211> 101
<212> PRT
<213> Homo sapiens

<400> 5520
Met Trp Leu Gly Gln Ala Phe Trp Ala Trp Leu Ser Phe Met Asn Arg
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Trp His Ser Lys Phe Leu Met Val Arg Ser Arg Gly Glu Cys Gly Ala
20 25 30
Gln Arg Gln Leu Leu Cys Val Phe Val Phe Arg Asp Ser Leu Arg Glu
35 40 45
Gly Asn Ala Arg Arg Asn Met Val Ser Ser Glu Ala His Gly Cys Phe
50 55 60
Leu Arg Pro Ala Val Phe Tyr Ala Thr Tyr Pro Cys Thr Ser Tyr Ala
65 70 75 80
Lys Glu Thr Lys Pro Ser Ala Cys Leu Phe Pro Leu Leu Ile Ile Gly
85 90 95
Lys Trp Met Leu Trp
100

<210> 5521
<211> 2524
<212> DNA
<213> Homo sapiens

<400> 5521
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cgcggttggc tactcagtgt cttggtctca agttgcctca ttgcggctgg cgttcccaat
120

acagacgcat cgtttctttt ttaatactcc ctaagaaagg gaataacctt caagctggcg
180
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240
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300
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360
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420
catggataca cagccctcat gtttgctgca ctttctggta ataaagacat cacatgggta
480
atgttagagg ctggtgctga gacagatggt gtcaactctg tgggaagaac agcagctcag
540
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660
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 2524

<210> 5522
 <211> 441
 <212> PRT
 <213> Homo sapiens

<400> 5522
 Met Val His Ile Lys Lys Gly Glu Leu Thr Gln Glu Glu Lys Glu Leu
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 Leu Glu Val Ile Gly Lys Gly Thr Val Gln Glu Ala Gly Thr Leu Leu
 20 25 30
 Ser Ser Lys Asn Val Arg Val Asn Cys Leu Asp Glu Asn Gly Met Thr
 35 40 45
 Pro Leu Met His Ala Ala Tyr Lys Gly Lys Leu Asp Met Cys Lys Leu
 50 55 60
 Leu Leu Arg His Gly Ala Asp Val Asn Cys His Gln His Glu His Gly
 65 70 75 80
 Tyr Thr Ala Leu Met Phe Ala Ala Leu Ser Gly Asn Lys Asp Ile Thr
 85 90 95
 Trp Val Met Leu Glu Ala Gly Ala Glu Thr Asp Val Val Asn Ser Val
 100 105 110
 Gly Arg Thr Ala Ala Gln Met Ala Ala Phe Val Gly Gln His Asp Cys
 115 120 125
 Val Thr Ile Ile Asn Asn Phe Phe Pro Arg Glu Arg Leu Asp Tyr Tyr
 130 135 140
 Thr Lys Pro Gln Gly Leu Asp Lys Glu Pro Lys Leu Pro Pro Lys Leu

145 150 155 160
 Ala Gly Pro Leu His Lys Ile Ile Thr Thr Thr Asn Leu His Pro Val
 165 170 175
 Lys Ile Val Met Leu Val Asn Glu Asn Pro Leu Leu Thr Glu Glu Ala
 180 185 190
 Ala Leu Asn Lys Cys Tyr Arg Val Met Asp Leu Ile Cys Glu Lys Cys
 195 200 205
 Met Lys Gln Arg Asp Met Asn Glu Val Leu Ala Met Lys Met His Tyr
 210 215 220
 Ile Ser Cys Ile Phe Gln Lys Cys Ile Asn Phe Leu Lys Asp Gly Glu
 225 230 235 240
 Asn Lys Leu Asp Thr Leu Ile Lys Ser Leu Leu Lys Gly Arg Ala Ser
 245 250 255
 Asp Gly Phe Pro Val Tyr Gln Glu Lys Ile Ile Arg Glu Ser Ile Arg
 260 265 270
 Lys Phe Pro Tyr Cys Glu Ala Thr Leu Leu Gln Gln Leu Val Arg Ser
 275 280 285
 Ile Ala Pro Val Glu Ile Gly Ser Asp Pro Thr Ala Phe Ser Val Leu
 290 295 300
 Thr Gln Ala Ile Thr Gly Gln Val Gly Phe Val Asp Val Glu Phe Cys
 305 310 315 320
 Thr Thr Cys Gly Glu Lys Gly Ala Ser Lys Arg Cys Ser Val Cys Lys
 325 330 335
 Met Val Ile Tyr Cys Asp Gln Thr Cys Gln Lys Thr His Trp Phe Thr
 340 345 350
 His Lys Lys Ile Cys Lys Asn Leu Lys Asp Ile Tyr Glu Lys Gln Gln
 355 360 365
 Leu Glu Ala Ala Lys Glu Lys Arg Gln Glu Glu Asn His Gly Lys Leu
 370 375 380
 Asp Val Asn Ser Asn Cys Val Asn Glu Glu Gln Pro Glu Ala Glu Val
 385 390 395 400
 Gly Ile Ser Gln Arg Asp Ser Asn Pro Glu Asp Ser Gly Glu Gly Lys
 405 410 415
 Lys Glu Ser Leu Glu Ser Glu Ala Glu Leu Glu Gly Leu Gln Asp Ala
 420 425 430
 Pro Ala Gly Pro Gln Val Ser Glu Glu
 435 440

<210> 5523

<211> 6190

<212> DNA

<213> Homo sapiens

<400> 5523

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 120
 gaagcaggct gcgggccgct ccagcacgac gtggagcccc gcggagacct cgagatgccc
 180
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360
aaaaaatact tcccctcgga gagacgcaat aaaccaagca ctctagatgc cctcaactat
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1320
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1380
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1680
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1920

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1980
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2040
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2160
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2220
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<211> 1193

<212> PRT

<213> Homo sapiens

<400> 5524

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Asn	Arg	Val	Ser	Glu	Glu	Leu	Ile	Met	Val	Val	Gln	Glu	Met	Lys	Lys
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565          570          575
Val Gln Ala Leu Gln Gly Asn Lys Asn Ala Pro Gln Lys Met Pro Thr
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595          600          605
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610          615          620
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660          665          670
His Thr Gln Lys Glu Glu Gln Asn Tyr Val Asp Lys Phe Arg Glu Lys
675          680          685
Ile Leu Ser Ser Pro Tyr Ser Ser Tyr Leu Gln Gln Glu Ser Arg Ser
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Lys Ala Lys Tyr Ser Tyr Phe Gln Gly Asp Ser Thr Ser Lys Gln Thr
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Arg Ser Ala Gly Cys Arg Lys Gly Lys His Lys Arg Lys Lys Leu Pro
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805          810          815
Gly Pro Pro Leu Ser Glu Gly Leu Gln Pro Tyr Pro Ala Phe Pro Phe
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Pro Tyr Leu Asp Thr Phe Met Thr Val Phe Leu Pro Asp Pro Pro Val
835          840          845
Cys Pro Leu Leu Ser Pro Ser Phe Leu Pro Cys Pro Phe Leu Gly Ala
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865          870          875          880
Thr Leu Asp Pro Pro Pro Ser Val Thr Ser Gln Arg Arg Glu Glu Glu
885          890          895
Lys Trp Glu Ala Gln Ser Glu Gly His Pro Phe Ile Thr Ser Arg Ser
900          905          910
Ser Ser Pro Leu Gln Leu Asn Leu Leu Gln Glu Glu Met Pro Arg Pro
915          920          925
Ser Glu Ser Pro Asp Gln Met Arg Arg Asn Thr Cys Pro Gln Thr Glu
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<211> 761

<212> DNA

<213> Homo sapiens

<400> 5525

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<211> 102

<212> PRT

<213> Homo sapiens

<400> 5526

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		35					40					45			
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	50					55					60				
Glu	Val	Val	Thr	Ser	Ala	Ile	Pro	Arg	Glu	Thr	Leu	Arg	Met	Ala	Phe
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Met	Arg	Glu	Leu	Ala	Ile	Glu	His	His	Ser	Ser	Lys	Tyr	Ala	His	Trp
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<210> 5527

<211> 728

<212> DNA

<213> Homo sapiens

<400> 5527

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<211> 176

<212> PRT

<213> Homo sapiens

<400> 5528

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	50					55					60				
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65					70					75				80	
Gly	Gly	Leu	Ser	Lys	Asn	Pro	Leu	Phe	Val	Gln	Met	His	Ala	Asp	Ile
				85					90				95		
Thr	Gly	Met	Pro	Val	Val	Leu	Ser	Gln	Glu	Val	Glu	Ser	Val	Leu	Val
			100					105					110		
Gly	Ala	Ala	Val	Leu	Gly	Ala	Cys	Ala	Ser	Gly	Asp	Phe	Ala	Ser	Val
		115					120				125				
Gln	Glu	Ala	Met	Ala	Lys	Met	Ser	Lys	Val	Gly	Lys	Val	Val	Phe	Pro
		130				135					140				
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<210> 5529

<211> 2602

<212> DNA

<213> Homo sapiens

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<210> 5530

<211> 603

<212> PRT

<213> Homo sapiens

<400> 5530

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			20					25								
Leu	Asn	Leu	Cys	Ala	Arg	Arg	Arg	Thr	Arg	Val	Gln	Arg	Pro	Ile	Val	45
			35				40									
Arg	Leu	Leu	Ser	Cys	Pro	Gly	Thr	Val	Ala	Lys	Asp	Leu	Arg	Arg	Asp	60
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Glu	Gln	Pro	Ser	Gly	Ser	Val	Glu	Thr	Gly	Phe	Glu	Asp	Lys	Ile	Pro	80
65					70				75							
Lys	Arg	Arg	Phe	Ser	Glu	Met	Gln	Asn	Glu	Arg	Arg	Glu	Gln	Ala	Gln	95
			85					90								
Arg	Thr	Val	Leu	Ile	His	Cys	Pro	Glu	Lys	Ile	Ser	Glu	Asn	Lys	Phe	110
			100					105								
Leu	Lys	Tyr	Leu	Ser	Gln	Phe	Gly	Pro	Ile	Asn	Asn	His	Phe	Phe	Tyr	125
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Ile	Gly	Ser	Leu	Gln	Asn	Gly	Thr	His	Thr	Pro	Ser	Thr	Ala	Met	Glu	

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Thr	Ala	Ile	Pro	Phe	Arg	Ser	Arg	Phe	Phe	Asn	Leu	Lys	Leu	Lys
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Gln	Thr	Ser	Glu	Arg	Ser	Arg	Val	Arg	Ser	Ser	Asn	Gln	Leu	Pro
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Ser	Asn	Lys	Gln	Leu	Phe	Glu	Leu	Leu	Cys	Tyr	Ala	Glu	Ser	Ile
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Asp	Gln	Leu	Asn	Thr	Leu	Leu	Lys	Glu	Phe	Gln	Leu	Thr	Glu	Glu
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Thr	Lys	Leu	Arg	Tyr	Leu	Thr	Cys	Ser	Leu	Ile	Glu	Asp	Met	Ala
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Ala	Tyr	Phe	Pro	Asp	Cys	Ile	Val	Arg	Pro	Phe	Gly	Ser	Ser	Val
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Thr	Phe	Gly	Lys	Leu	Gly	Cys	Asp	Leu	Asp	Met	Phe	Leu	Asp	Leu
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Glu	Thr	Arg	Asn	Leu	Ser	Ala	His	Lys	Ile	Ser	Gly	Asn	Phe	Leu
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Glu	Phe	Gln	Val	Lys	Asn	Val	Pro	Ser	Glu	Arg	Ile	Ala	Thr	Gln
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Ile	Leu	Ser	Val	Leu	Gly	Glu	Cys	Leu	Asp	His	Phe	Gly	Pro	Gly
					300					305				310
Val	Gly	Val	Gln	Lys	Ile	Leu	Asn	Ala	Arg	Cys	Pro	Leu	Val	Arg
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Ser	His	Gln	Ala	Ser	Gly	Phe	Gln	Cys	Asp	Leu	Thr	Thr	Asn	Asn
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Ile	Ala	Leu	Thr	Ser	Ser	Glu	Leu	Leu	Tyr	Ile	Tyr	Gly	Ala	Leu
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Ser	Arg	Val	Arg	Ala	Leu	Val	Phe	Ser	Val	Arg	Cys	Trp	Ala	Arg
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His	Ser	Leu	Thr	Ser	Ser	Ile	Pro	Gly	Ala	Trp	Ile	Thr	Asn	Phe
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Leu	Thr	Met	Met	Val	Ile	Phe	Phe	Leu	Gln	Arg	Arg	Ser	Pro	Pro
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Leu	Pro	Thr	Leu	Asp	Ser	Leu	Lys	Thr	Leu	Ala	Asp	Ala	Glu	Asp
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Cys	Val	Ile	Glu	Gly	Asn	Asn	Cys	Thr	Phe	Val	Arg	Asp	Leu	Ser
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Ile	Lys	Pro	Ser	Gln	Asn	Thr	Glu	Thr	Leu	Glu	Leu	Leu	Leu	Lys
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Phe	Phe	Glu	Tyr	Phe	Gly	Asn	Phe	Ala	Phe	Asp	Lys	Asn	Ser	Ile
					450					455				460
Ile	Arg	Gln	Gly	Arg	Glu	Gln	Asn	Lys	Pro	Asp	Ser	Ser	Pro	Leu
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Ile	Gln	Asn	Pro	Phe	Glu	Thr	Ser	Leu	Asn	Ile	Ser	Lys	Asn	Val
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Gln	Ser	Gln	Leu	Gln	Lys	Phe	Val	Asp	Leu	Ala	Arg	Glu	Ser	Ala
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Ile	Leu	Gln	Gln	Glu	Asp	Thr	Asp	Arg	Pro	Ser	Ile	Ser	Ser	Asn
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Pro	Trp	Gly	Leu	Val	Ser	Leu	Leu	Leu	Pro	Ser	Ala	Pro	Asn	Arg
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Ser	Phe	Thr	Lys	Lys	Lys	Ser	Asn	Lys	Phe	Ala	Ile	Glu	Thr	Val
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Asn	Leu	Leu	Glu	Ser	Leu	Lys	Gly	Asn	Arg	Thr	Glu	Asn	Phe	Thr
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<210> 5531
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<212> DNA
<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 5532
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 35 40 45
 Glu Asn Gly Gln Arg Lys Tyr Gly Gly Pro Pro Pro Gly Trp Glu Gly
 50 55 60
 Pro His Pro Gln Arg Gly Cys Glu Val Phe Val Gly Lys Ile Pro Arg
 65 70 75 80
 Asp Val Tyr Glu Asp Glu Leu Val Pro Val Phe Glu Ala Val Gly Arg
 85 90 95
 Ile Tyr Glu Leu Arg Leu Met Met Asp Phe Asp Gly Lys Asn Arg Gly
 100 105 110
 Tyr Ala Phe Val Met Tyr Cys His Lys His Glu Ala Lys Arg Ala Val
 115 120 125
 Arg Glu Leu Asn Asn Tyr Glu Ile Arg Pro Gly Arg Leu Leu Gly Val
 130 135 140
 Cys Cys Ser Val Asp Asn Cys Arg Leu Phe Ile Gly Gly Ile Pro Lys
 145 150 155 160
 Met Lys Lys Arg Glu Glu Ile Leu Glu Glu Ile Ala Lys Val Thr Glu
 165 170 175
 Gly Val Leu Asp Val Ile Val Tyr Ala Ser Ala Ala Asp Lys Met Lys
 180 185 190
 Asn Arg Gly Phe Ala Phe Val Glu Tyr Glu Ser His Arg Ala Ala Ala
 195 200 205
 Met Ala Arg Arg Lys Leu Met Pro Gly Arg Ile Gln Leu Trp Gly His
 210 215 220
 Gln Ile Ala Val Asp Trp Ala Glu Pro Glu Ile Asp Val Asp Glu Asp
 225 230 235 240
 Val Met Glu Thr Val Lys Ile Leu Tyr Val Arg Asn Leu Met Ile Glu
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 Thr Thr Glu Asp Thr Ile Lys Lys Ser Phe Gly Gln Phe Asn Pro Gly
 260 265 270
 Cys Val Glu Arg Val Lys Lys Ile Arg Asp Tyr Ala Phe Val His Phe
 275 280 285
 Thr Ser Arg Glu Asp Ala Val His Ala Met Asn Asn Leu Asn Gly Thr
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 Glu Leu Glu Gly Ser Cys Leu Glu Val Thr Leu Ala Lys Pro Val Asp
 305 310 315 320
 Lys Glu Gln Tyr Ser Arg Tyr Gln Lys Ala Ala Arg Gly Gly Gly Ala
 325 330 335
 Ala Glu Ala Ala Gln Gln Pro Ser Tyr Val Tyr Ser Cys Asp Pro Tyr

340 345 350
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 Arg Asp Tyr Phe Val Lys Ala Gly Ser Ile Arg Gly Arg Gly Arg Gly
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 Ala Ala Gly Asn Arg Ala Pro Gly Pro Arg Gly Ser Tyr Leu Gly Gly
 385 390 395 400
 Tyr Ser Ala Gly Arg Gly Ile Tyr Ser Arg Tyr His Glu Gly Lys Gly
 405 410 415
 Lys Gln Gln Glu Lys Gly Tyr Glu Leu Val Pro Asn Leu Glu Ile Pro
 420 425 430
 Thr Val Asn Pro Val Ala Ile Lys Pro Gly Thr Val Ala Ile Pro Ala
 435 440 445
 Ile Gly Ala Gln Tyr Ser Met Phe Pro Ala Ala Pro Ala Pro Lys Met
 450 455 460
 Ile Glu Asp Gly Lys Ile His Thr Val Glu His Met Ile Ser Pro Ile
 465 470 475 480
 Ala Val Gln Pro Asp Pro Ala Ser Ala Ala Ala Ala Ala Ala Ala
 485 490 495
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 Phe Gln Gly Arg Pro Ile Thr Pro Val Tyr Thr Val Ala Pro Asn Val
 515 520 525
 Gln Arg Ile Pro Thr Ala Gly Ile Tyr Gly Ala Ser Tyr Val Pro Phe
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<211> 505

<212> DNA

<213> Homo sapiens

<400> 5533

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<210> 5534
 <211> 168
 <212> PRT
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<400> 5534
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 Leu Ala Ser Leu Ser Ala Glu Glu Leu Lys Glu Leu Glu Arg Glu Leu
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 Glu Asp Ile Glu Pro Asp Arg Asn Leu Pro Val Gly Leu Arg Gln Lys
 65 70 75 80
 Ser Leu Thr Glu Lys Thr Pro Thr Gly Thr Phe Ser Arg Glu Ala Leu
 85 90 95
 Met Ala Tyr Trp Glu Lys Glu Ser Gln Lys Leu Leu Glu Lys Glu Arg
 100 105 110
 Leu Gly Glu Cys Gly Lys Val Ala Glu Asp Lys Glu Glu Ser Glu Glu
 115 120 125
 Glu Leu Ile Phe Thr Glu Ser Asn Ser Glu Val Ser Glu Glu Val Tyr
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 <211> 1887
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<210> 5536

<211> 306

<212> PRT

<213> Homo sapiens

<400> 5536

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 35 40 45
 Arg Glu Glu Asp Asp Glu Leu Leu Gly Asn Asp Asp Ser Asp Lys Thr
 50 55 60
 Glu Leu Leu Ala Gly Gln Lys Lys Ser Ser Pro Phe Trp Thr Phe Glu
 65 70 75 80
 Tyr Tyr Gln Thr Phe Phe Asp Val Asp Thr Tyr Gln Val Phe Asp Arg
 85 90 95
 Ile Lys Gly Ser Leu Leu Pro Ile Pro Gly Lys Asn Phe Val Arg Leu
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 115 120 125
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 130 135 140
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 145 150 155 160
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 165 170 175
 Leu Ala Leu Trp Gly Phe Leu Met Trp Arg Asn Ser Lys Val Met Asn
 180 185 190
 Ile Val Ser Tyr Ser Phe Leu Glu Ile Val Cys Val Tyr Gly Tyr Ser
 195 200 205
 Leu Phe Ile Tyr Ile Pro Thr Ala Ile Leu Trp Ile Ile Pro Gln Lys
 210 215 220
 Ala Val Arg Trp Ile Leu Val Met Ile Ala Leu Gly Ile Ser Gly Ser
 225 230 235 240
 Leu Leu Ala Met Thr Phe Trp Pro Ala Val Arg Glu Asp Asn Arg Arg
 245 250 255
 Val Ala Leu Ala Thr Ile Val Thr Ile Val Leu Leu His Met Leu Leu
 260 265 270
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<210> 5537

<211> 2881

<212> DNA

<213> Homo sapiens

<400> 5537

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Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr Ile		95
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Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser		170
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Pro Gly His His Ala Glu Glu Ser Thr Ala Met Gly Phe Cys Phe Phe
850 855 860
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420
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<210> 5546

<211> 183

<212> PRT

<213> Homo sapiens

<400> 5546

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35 40 45
Asn Glu Met Leu Leu Asn Phe Asn Asn Leu Ser Ser Ala Arg Leu Gln
50 55 60
Gln Met Ser Glu Arg Phe Leu His His Thr Arg Thr Leu Val Glu Met
65 70 75 80
Lys Arg Asp Leu Asp Ser Ile Phe Arg Arg Ile Arg Thr Leu Lys Gly
85 90 95
Lys Leu Ala Arg Gln His Pro Glu Ala Phe Ser His Ile Pro Glu Ala
100 105 110
Ser Phe Leu Glu Glu Glu Asp Glu Asp Pro Ile Pro Pro Ser Thr Thr
115 120 125
Thr Thr Ile Ala Thr Ser Glu Gln Ser Thr Gly Ser Cys Asp Thr Ser
130 135 140
Pro Asp Thr Val Ser Pro Ser Leu Ser Pro Gly Phe Glu Asp Leu Ser
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Asp Glu Glu Met Thr Gly Glu
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<210> 5547

<211> 1391

<212> DNA

<213> Homo sapiens

<400> 5547

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420
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<210> 5548

<211> 167

<212> PRT

<213> Homo sapiens

<400> 5548

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			20					25					30		
Leu	Gln	Thr	Asn	Val	Arg	Ser	Gln	Ile	Leu	Arg	Leu	Arg	His	Thr	Ala
		35					40					45			
Phe	Val	Ile	Pro	Lys	Lys	Asn	Val	Pro	Thr	Ser	Lys	Arg	Glu	Thr	Tyr
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Thr	Glu	Asp	Phe	Ile	Lys	Lys	Gln	Ile	Glu	Glu	Phe	Asn	Ile	Gly	Lys
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Arg	His	Leu	Ala	Asn	Met	Met	Gly	Glu	Asp	Pro	Glu	Thr	Phe	Thr	Gln
			85					90					95		
Glu	Asp	Ile	Asp	Arg	Ala	Ile	Ala	Tyr	Leu	Phe	Pro	Ser	Gly	Leu	Phe
		100					105						110		
Glu	Lys	Arg	Ala	Arg	Pro	Val	Met	Lys	His	Pro	Glu	Gln	Ile	Phe	Pro
	115					120						125			
Arg	Gln	Arg	Ala	Ile	Gln	Trp	Gly	Glu	Asp	Gly	Arg	Pro	Phe	His	Tyr

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<210> 5549
 <211> 1865
 <212> DNA
 <213> Homo sapiens

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 480
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<210> 5550

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5550

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Arg	Trp	Ser	Arg	Tyr	Ser	Pro	Glu	Phe	Lys	Asp	Pro	Leu	Ile	Asp	Lys	35	40	45	
Glu	Tyr	Tyr	Arg	Lys	Pro	Val	Glu	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Tyr	50	55	60	
Val	Arg	Glu	Leu	Lys	Lys	Thr	Gln	Leu	Ile	Lys	Ala	Ala	Pro	Ala	Gly	65	70	75	80
Lys	Thr	Ser	Ser	Val	Phe	Glu	Asp	Pro	Val	Ile	Ser	Lys	Phe	Thr	Asn	85	90	95	
Met	Met	Met	Ile	Gly	Gly	Asn	Lys	Val	Leu	Ala	Arg	Ser	Leu	Met	Ile	100	105	110	
Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala	115	120	125	
Ala	Ser	Ala	Glu	Glu	Gln	Ala	Thr	Ile	Glu	Arg	Asn	Pro	Tyr	Thr	Ile	130	135	140	
Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro	145	150	155	160
Ile	Leu	Lys	Gly	Gly	Arg	Phe	Tyr	Gln	Val	Pro	Val	Pro	Leu	Pro	Asp	165	170	175	
Arg	Arg	Arg	Arg	Phe	Leu	Ala	Met	Lys	Trp	Met	Ile	Thr	Glu	Cys	Arg	180	185	190	
Asp	Lys	Lys	His	Gln	Arg	Thr	Leu	Met	Pro	Glu	Lys	Leu	Ser	His	Lys				

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Leu	Leu	Glu	Ala	Phe	His	Asn	Gln	Gly	Pro	Val	Ile	Lys	Arg	Lys	His
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<210> 5551
 <211> 1689
 <212> DNA
 <213> Homo sapiens

<400> 5551
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<210> 5552

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5552

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			20					25					30		
Tyr	Leu	Leu	Asp	Pro	Tyr	Val	Asn	Leu	Ala	Pro	Gly	Cys	Arg	Ser	Leu
		35					40					45			
Phe	Ser	Val	Ile	Val	Arg	Val	Val	Gly	Asp	Leu	Met	Leu	Arg	Ile	Gln
		50				55					60				
Arg	Ile	Gln	Asp	Phe	Thr	Pro	Lys	Leu	Leu	Leu	Val	Arg	Lys	Arg	Leu
65					70					75				80	
Leu	Gly	Leu	Glu	Pro	Glu	Gly	Pro	Ile	Ser	Asp	Leu	Glu	Pro	Val	Glu
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<210> 5553

<211> 274

<212> DNA

<213> Homo sapiens

<400> 5553

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274

<210> 5554
<211> 90
<212> PRT
<213> Homo sapiens

<400> 5554
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35 40 45
Gly Pro Ala Thr Ala Pro Ala Val Val Leu Ser His Tyr Arg Gly Cys
50 55 60
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85 90

<210> 5555
<211> 414
<212> DNA
<213> Homo sapiens

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<210> 5556
<211> 115
<212> PRT
<213> Homo sapiens

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Gly Gln Arg Ser Asp Val Gly Phe Arg Lys Gln Gly Pro Gly Gly Asp
20 25 30
Glu Ser Gln Gly Cys Asp Ser Arg Arg Asp Ser Cys Glu Gly Pro Gly

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Gln	Ala	Lys	Leu	Glu	Asp	Ser
	50		55		60	
Arg	Cys	Leu	Leu	Asp	Leu	Ser
65			70		75	
Ala	Pro	Gly	Pro	Thr	Pro	Val
			85		90	
Gln	Leu	Phe	Pro	Phe	Ser	His
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Ser	Ala	Ser				
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<210> 5557

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 5557

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<213> Homo sapiens

<400> 5558

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Ser Ser Val Glu Val Tyr Ala Trp Ala Pro Lys Pro Tyr His Lys Phe				960
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Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp				
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Cys Ser Ile Lys Pro His Ala Ile Ile Ile Leu Pro Asn Thr Asp Gly				1040
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Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly Glu				
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<212> DNA

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<210> 5564

<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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Ser	Ala	Glu	Arg	Ala	Leu	Glu	Glu	Ala	Val	Ala	Thr	Gly	Thr	Leu	Asn
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Leu	Ser	Asn	Arg	Arg	Leu	Lys	His	Phe	Pro	Arg	Gly	Ala	Ala	Arg	Ser
	50					55				60					
Tyr	Asp	Leu	Ser	Asp	Ile	Thr	Gln	Ala	Asp	Leu	Ser	Arg	Asn	Arg	Phe
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Pro	Glu	Val	Pro	Glu	Ala	Ala	Cys	Gln	Leu	Val	Ser	Leu	Glu	Gly	Leu
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Ser	Leu	Tyr	His	Asn	Cys	Leu	Arg	Cys	Leu	Asn	Pro	Ala	Leu	Gly	Asn
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Leu	Thr	Ala	Leu	Thr	Tyr	Leu	Asn	Leu	Ser	Arg	Asn	Gln	Leu	Ser	Leu
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Leu	Pro	Pro	Tyr	Ile	Cys	Gln	Leu	Pro	Leu	Arg	Val	Leu	Ile	Val	Ser
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Asn	Asn	Lys	Leu	Gly	Ala	Leu	Pro	Pro	Asp	Ile	Gly	Thr	Leu	Gly	Ser
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Glu	Leu	Cys	Gly	Leu	Ser	Ser	Leu	Arg	Asp	Leu	Asn	Val	Arg	Arg	Asn
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Gln	Leu	Ser	Thr	Leu	Pro	Glu	Glu	Leu	Gly	Asp	Leu	Pro	Leu	Val	Arg
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Leu	Asp	Phe	Ser	Cys	Asn	Arg	Val	Ser	Arg	Ile	Pro	Val	Ser	Phe	Cys
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Arg	Leu	Arg	His	Leu	Gln	Val	Ile	Leu	Leu	Asp	Ser	Asn	Pro	Leu	Gln
225				230					235					240	
Ser	Pro	Pro	Ala	Gln	Val	Cys	Leu	Lys	Gly	Lys	Leu	His	Ile	Phe	Lys
		245						250					255		
Tyr	Leu	Ser	Thr	Glu	Ala	Gly	Gln	Arg	Gly	Ser	Ala	Leu	Gly	Asp	Leu

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Ala Pro Ser Arg Pro Pro Ser Phe Ser Pro Cys Pro Ala Glu Asp Leu		
275	280	285
Phe Pro Gly His Arg Tyr Asp Gly Gly Leu Asp Ser Gly Phe His Ser		
290	295	300
Val Asp Ser Gly Ser Lys Arg Trp Ser Gly Asn Glu Ser Thr Asp Glu		
305	310	315
Phe Ser Glu Leu Ser Phe Arg Ile Ser Glu Leu Ala Arg Glu Pro Arg		
325	330	335
Gly Pro Arg Glu Arg Lys Glu Asp Gly Ser Ala Asp Gly Asp Pro Val		
340	345	350
Gln Ile Asp Phe Ile Asp Ser His Val Pro Gly Glu Asp Glu Glu Arg		
355	360	365
Gly Thr Val Glu Glu Gln Arg Pro Pro Glu Leu Ser Pro Gly Ala Gly		
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Asp Arg Glu Arg Ala Pro Ser Ser Arg Arg Glu Glu Pro Ala Gly Glu		
385	390	395
Glu Arg Arg Arg Pro Asp Thr Leu Gln Leu Trp Gln Glu Arg Glu Arg		
405	410	415
Arg Gln Gln Gln Gln Ser Gly Ala Trp Gly Ala Pro Arg Lys Asp Ser		
420	425	430
Leu Leu Lys Pro Gly Leu Arg Ala Val Val Gly Gly Ala Ala Val		
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Ser Thr Gln Ala Met His Asn Gly Ser Pro Lys Ser Ser Ala Ser Gln		
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Ala Gly Gly Cys Ser Gly Ala Gly Ser Pro Ala Pro Ala Pro Ala Ser		
465	470	475
Gln Glu Pro Leu Pro Ile Ala Gly Pro Ala Thr Ala Pro Ala Pro Arg		
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Pro Leu Gly Ser Ile Gln Arg Pro Asn Ser Phe Leu Phe Arg Ser Ser		
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Ser Gln Ser Gly Ser Gly Pro Ser Ser Pro Asp Ser Val Leu Arg Pro		
515	520	525
Arg Arg Tyr Pro Gln Val Pro Asp Glu Lys Asp Leu Met Thr Gln Leu		
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Arg Gln Val Leu Glu Ser Arg Leu Gln Arg Pro Leu Pro Glu Asp Leu		
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Ala Glu Ala Leu Ala Ser Gly Val Ile Leu Cys Gln Leu Ala Asn Gln		
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Leu Arg Pro Arg Ser Val Pro Phe Ile His Val Pro Ser Pro Ala Val		
580	585	590
Pro Lys Leu Ser Ala Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu		
595	600	605
Glu Ala Cys Arg Lys Met Gly Val Pro Glu Ala Asp Leu Cys Ser Pro		
610	615	620
Ser Asp Leu Leu Gln Gly Thr Ala Arg Gly Leu Arg Thr Ala Leu Glu		
625	630	635
Ala Val Lys Arg Val Gly Gly Lys Ala Leu Pro Pro Leu Trp Pro Pro		
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Ser Gly Leu Gly Gly Phe Val Val Phe Tyr Val Val Leu Met Leu Leu		
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<211> 472
<212> DNA
<213> Homo sapiens

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<212> PRT
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Ala Gly Ser Thr Gly Ala Tyr His Ala Trp Leu Phe
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<210> 5567
<211> 968
<212> DNA
<213> Homo sapiens

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<210> 5569
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<212> DNA

<213> Homo sapiens

<400> 5569

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<210> 5570

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5570

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20           25           30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35           40           45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50           55           60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65           70           75           80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85           90           95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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		115						120					125				
Gly	Thr	Leu	Ala	Lys	Met	Gln	Cys	Leu	Pro	Asn	Ser	His	Ile	Ser	Phe		
		130						135					140				
Asn	Gln	Gly	Ala	Ile	Pro	Ala	Trp	Lys	Ser	Pro	Ser	Cys	Ser	Cys	Trp		
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<210> 5571
 <211> 405
 <212> DNA
 <213> Homo sapiens

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<400> 5572
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 35 40 45
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 Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Leu Lys Ser Glu Leu
 65 70 75 80
 Leu Pro Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu His
 85 90 95
 His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Met Met Ala
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<210> 5573

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5573

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<211> 312
 <212> PRT
 <213> Homo sapiens

<400> 5574

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			20					25					30		
Ala	Glu	Ile	Glu	Glu	Ala	Leu	Gln	Ala	Gly	Leu	Ala	Pro	Leu	Gly	Glu
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Tyr	Arg	Leu	Leu	Gly	Arg	Met	Phe	Arg	Arg	Asp	Glu	Asn	Arg	Lys	Val
	50					55					60				
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Glu	Ile	Pro	Gly	Lys	Gly	Gly	Ile	Trp	Arg	Val	Ile	Phe	Lys	Pro	Pro
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Asp	Pro	Asp	Asn	Thr	Phe	Leu	Ser	Arg	Leu	Asn	Glu	Phe	Leu	Ala	Gly
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Glu	Gly	Met	Thr	Val	Gly	Glu	Leu	Ser	Arg	Ala	Leu	Gly	His	Glu	Asn
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Gly	Ser	Leu	Asp	Pro	Glu	Gln	Gly	Met	Ile	Pro	Glu	Met	Trp	Ala	Pro
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Met	Leu	Ala	Gln	Ala	Leu	Glu	Ala	Leu	Gln	Pro	Ala	Leu	Gln	Cys	Leu
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Lys	Tyr	Lys	Lys	Leu	Arg	Val	Phe	Ser	Gly	Arg	Glu	Ser	Pro	Glu	Pro
				165					170					175	
Gly	Glu	Glu	Glu	Phe	Gly	Arg	Trp	Met	Phe	His	Thr	Thr	Gln	Met	Ile
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Lys	Ala	Trp	Gln	Val	Pro	Asp	Val	Glu	Lys	Arg	Arg	Arg	Leu	Leu	Glu
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Ser	Leu	Arg	Gly	Pro	Ala	Leu	Asp	Val	Ile	Arg	Val	Leu	Lys	Ile	Asn
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Asn	Pro	Leu	Ile	Thr	Val	Asp	Glu	Cys	Leu	Gln	Ala	Leu	Glu	Glu	Val
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Phe	Gly	Val	Thr	Asp	Asn	Pro	Arg	Glu	Leu	Gln	Val	Lys	Tyr	Leu	Thr
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Thr	Tyr	Gln	Lys	Asp	Glu	Glu	Lys	Leu	Ser	Ala	Tyr	Val	Leu	Arg	Leu
			260					265					270		
Glu	Pro	Leu	Leu	Gln	Lys	Leu	Val	Gln	Arg	Gly	Ala	Ile	Glu	Arg	Asp
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Ala	Val	Asn	Gln	Ala	Arg	Leu	Asp	Gln	Val	Ile	Ala	Gly	Ala	Val	His
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 <211> 2405
 <212> DNA
 <213> Homo sapiens

<400> 5575

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<210> 5576

<211> 367

<212> PRT

<213> Homo sapiens

<400> 5576

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			20					25					30		
Gln	Ala	Leu	Thr	Gly	Asn	Glu	Gly	Arg	Val	Ser	Val	Glu	Asn	Ile	Lys
		35					40					45			
Gln	Leu	Leu	Gln	Cys	Leu	Val	Pro	Gly	Ser	Thr	Thr	Leu	His	Ser	Ala
	50					55					60				
Glu	Ile	Leu	Ala	Glu	Ile	Ala	Arg	Ile	Leu	Arg	Pro	Gly	Gly	Cys	Leu
65					70					75				80	
Phe	Leu	Lys	Glu	Pro	Val	Glu	Thr	Ala	Val	Asp	Asn	Asn	Ser	Lys	Val
			85					90					95		
Lys	Thr	Ala	Ser	Lys	Leu	Cys	Ser	Ala	Leu	Thr	Leu	Ser	Gly	Leu	Val
		100						105					110		
Glu	Val	Lys	Glu	Leu	Gln	Arg	Glu	Pro	Leu	Thr	Pro	Glu	Glu	Val	Gln
		115				120						125			
Ser	Val	Arg	Glu	His	Leu	Gly	His	Glu	Ser	Asp	Asn	Leu	Leu	Phe	Val
	130					135					140				
Gln	Ile	Thr	Gly	Lys	Lys	Pro	Asn	Phe	Glu	Val	Gly	Ser	Ser	Arg	Gln
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Leu	Lys	Leu	Ser	Ile	Thr	Lys	Lys	Ser	Ser	Pro	Ser	Val	Lys	Pro	Ala

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<210> 5577
<211> 659
<212> DNA
<213> Homo sapiens
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360
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480
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gcagccatga agggcagtgg gtagaggagt gcaggcaccc tgaccagcag agattgctgc
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<210> 5578

<211> 166

<212> PRT

<213> Homo sapiens

<400> 5578

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Leu Leu Gln Tyr Gly Asp Met Glu Glu Gly Xaa Gln Pro Ala Tyr Pro
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Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu
35 40 45
Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys
50 55 60
Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg
65 70 75 80
Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu
85 90 95
Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met
100 105 110
Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu
115 120 125
Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg
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Pro Pro Pro Val Pro Pro Pro Pro Thr Asn Phe Asn Phe Cys Tyr Asp
145 150 155 160
Cys Ser Ile Ala Glu Pro
165

<210> 5579

<211> 1312

<212> DNA

<213> Homo sapiens

<400> 5579

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120
cacttactac ctacagctcc aactaccgtg aatgtaacac atcgtccagt aactcaggtg
180
accacaagac tcctgttacc aagagctcct gcaaaccacc aggtgggtta tacaactctt
240
cctgcaccac cagctcaggc tcccttgcca ggaactgtta tgcaggctcc tgctgttcgg
300
caggtcaatc cccaaaatag tgttacagtt cgagtgcctc aaacaaccac atatgttgta
360
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420
caagtgcata ctgagcccc acgccccgtg caccagcac ccttaccaga agctccacaa
480
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540

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 600
 cgaagctgtg ccactgttga tagctacat ctctatgctt accatgagga acccagtgcc
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 720
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 780
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 840
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<210> 5580

<211> 283

<212> PRT

<213> Homo sapiens

<400> 5580

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Gln	Pro	Ile	Gln	Pro	Ala	Pro	Pro	Leu	Gln	Pro	Ser	Gly	Val	Pro	Thr
			20					25					30		
Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
		35					40					45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
		50				55					60				
Pro	Val	Pro	Arg	Ala	Pro	Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu
65					70					75					80
Pro	Ala	Pro	Pro	Ala	Gln	Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala
				85					90					95	
Pro	Ala	Val	Arg	Gln	Val	Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val
				100					105					110	
Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
		115					120					125			
Thr	Gly	Pro	Gln	Leu	Thr	Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr
		130					135					140			
Glu	Pro	Pro	Arg	Pro	Val	His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln
145					150					155					160
Pro	Gln	Arg	Leu	Pro	Pro	Glu	Ala	Ala	Ser	Thr	Ser	Leu	Pro	Gln	Lys

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      165      170      175
Pro His Leu Lys Leu Ala Arg Val Gln Ser Gln Asn Gly Ile Val Leu
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Ser Trp Ser Val Leu Glu Val Asp Arg Ser Cys Ala Thr Val Asp Ser
      195      200      205
Tyr His Leu Tyr Ala Tyr His Glu Glu Pro Ser Ala Thr Val Pro Ser
      210      215      220
Gln Trp Lys Lys Ile Gly Glu Val Lys Ala Leu Pro Leu Pro Met Ala
225      230      235      240
Cys Thr Leu Thr Gln Phe Val Ser Gly Ser Lys Tyr Tyr Phe Ala Val
      245      250      255
Arg Ala Lys Asp Ile Tyr Gly Arg Phe Gly Pro Phe Cys Asp Pro Gln
      260      265      270
Ser Thr Asp Val Ile Ser Ser Thr Gln Ser Ser
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<210> 5581
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 5581
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 240
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 360
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 420
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 600
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<210> 5582
 <211> 212
 <212> PRT
 <213> Homo sapiens

<400> 5582
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 20 25 30
 Ser Leu Ala Ser Arg Glu Leu Pro Val Ser Ser Trp Gln Val Thr Glu
 35 40 45
 Pro Ser Ser Lys Asn Leu Trp Glu Gln Ile Cys Lys Glu Tyr Glu Ala
 50 55 60
 Glu Gln Pro Pro Phe Pro Glu Gly Tyr Lys Val Lys Gln Glu Pro Val
 65 70 75 80
 Ile Thr Val Ala Pro Val Glu Glu Met Leu Phe His Gly Phe Ser Ala
 85 90 95
 Glu His Tyr Phe Pro Val Ser His Phe Thr Met Ile Ser Arg Thr Pro
 100 105 110
 Cys Pro Gln Asp Lys Ser Glu Thr Ile Asn Pro Lys Thr Cys Ser Pro
 115 120 125
 Lys Glu Tyr Leu Glu Thr Phe Ile Phe Pro Val Leu Leu Pro Gly Met
 130 135 140
 Ala Ser Leu Leu His Gln Ala Lys Lys Glu Lys Cys Phe Glu Val Ser
 145 150 155 160
 Cys Leu Ala Gly Phe Leu Tyr Phe Glu Ile Leu Asn His Ser Leu Leu
 165 170 175
 Ser Asp Asp Ser Ser Leu Ser Trp Tyr His Gln Val Val Leu Gln Met
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 Thr Pro Ser Gly Gly Lys Ala Cys Val Trp Gly His Leu Pro Ser Ser
 195 200 205
 Ser His Thr Ile
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<210> 5583

<211> 2101

<212> DNA

<213> Homo sapiens

<400> 5583

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 360
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 420
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 480
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 540
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 600

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2100
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2101

<210> 5584

<211> 454

<212> PRT

<213> Homo sapiens

<400> 5584

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Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
35 40 45
Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
50 55 60
Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
65 70 75 80
Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
85 90 95
Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
100 105 110
Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
115 120 125
Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
130 135 140
Met Pro Ala Ala Glu Leu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
145 150 155 160
Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
165 170 175
Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
180 185 190
Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp
195 200 205
Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His
210 215 220
Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val
225 230 235 240
Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
245 250 255
Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
260 265 270
Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
275 280 285
Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
290 295 300
Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
305 310 315 320
Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
325 330 335
Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
340 345 350
Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
355 360 365
Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
370 375 380
Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

385 390 395 400
 Glu His Met Ala Gln Gln Asp Pro Gly Leu Pro Phe Leu Phe Trp Phe
 405 410 415
 Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Phe Lys Leu
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 Ile Tyr Asn Glu Tyr Cys Gly Pro Gly Ala Lys Pro Leu Phe Arg Ser
 435 440 445
 Lys Glu Asp Pro Ser Val
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<210> 5585
 <211> 740
 <212> DNA
 <213> Homo sapiens

<400> 5585
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 300
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 740

<210> 5586
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 5586
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 20 25 30
 Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

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<400> 5588
Met Ala Pro Glu His Glu Ile Pro Lys Ile Gly Trp Tyr Ser Arg Phe
  1             5             10             15
Ala Arg His Pro Phe Tyr Gly Ser Ala Gly Val Asn Ser Gly Val Met

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Leu	Met	Asn	Leu	Thr	Arg	Ile	Arg	Ser	Thr	Gln	Phe	Lys	Asn	Ser	Met
	35		40		45										
Ile	Pro	Thr	Gly	Leu	Ala	Trp	Glu	Asp	Met	Leu	Tyr	Pro	Leu	Tyr	Gln
	50		55		60										
Lys	Tyr	Lys	Asn	Ala	Ile	Thr	Trp	Gly	Asp	Gln	Asp	Leu	Leu	Asn	Ile
65			70		75					80					
Ile	Phe	Tyr	Phe	Asn	Pro	Glu	Cys	Leu	Tyr	Val	Phe	Pro	Cys	Gln	Trp
	85		90		95										
Asn	Tyr	Arg	Pro	Asp	His	Cys	Met	Tyr	Gly	Ser	Asn	Cys	Arg	Glu	Ala
	100		105		110										
Glu	His	Glu	Gly	Val	Ser	Val	Leu	His	Gly	Asn	Arg	Gly	Val	Tyr	His
	115		120		125										
Asp	Asp	Lys	Gln	Pro	Thr	Phe	Arg	Ala	Leu	Tyr	Glu	Ala	Ile	Arg	Asp
	130		135		140										
Phe	Pro	Phe	Gln	Asp	Asn	Leu	Phe	Gln	Ser	Met	Tyr	Tyr	Pro	Leu	Gln
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Leu	Lys	Phe	Leu	Glu	Thr	Val	His	Thr	Leu	Cys	Gly	Arg	Ile	Pro	Gln
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<212> DNA

<213> Homo sapiens

<400> 5589

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<212> PRT

<213> Homo sapiens

<400> 5592

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 Phe Pro Lys Ala Leu Gly Gln Leu Ile Ser Lys Tyr Ser Leu Arg Glu
 65 70 75 80
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 85 90 95Pro Phe Leu
 Gln Ala Pro Ser Gly Ala Glu Leu Trp Val Trp Phe
 100 105 110
 Gln Asp Thr Val Thr Asp Val Asp Lys Ser Trp Arg Glu Leu Ser Asn
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	180		185		190	
Ser Lys Ala Gly Leu Ser Val Leu Leu Lys Ala Asp Arg Leu Phe His						
	195		200		205	
Thr Ser Tyr His Ser Gln Ala Val His Ile Arg Pro Val Cys Arg Asn						
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Ala Arg Cys Thr Ser Ile Ser Trp Glu Leu Arg Gln Thr Leu Ser Val						
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Glu Ser Arg Val Tyr Val Asp Ile Thr Thr Tyr Asn Gln Pro Cys Leu						
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Cys Val Gln Asp Asn Glu Thr Leu Glu Val His Pro Pro Pro Thr Thr						
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Thr Tyr Gln Asp Val Ile Leu Gly Thr Arg Lys Thr Tyr Ala Ile Tyr						
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Asp Leu Leu Asp Thr Ala Met Ile Asn Asn Ser Arg Asn Leu Asn Ile						
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Gln Leu Lys Trp Lys Arg Pro Pro Glu Asn Glu Ala Pro Pro Val Pro						
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Phe Leu His Ala Gln Arg Tyr Val Ser Gly Tyr Gly Leu Gln Lys Gly						
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Glu Arg Ala Leu Leu Lys Trp Thr Glu Tyr Thr Pro Asp Pro Asn His						
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Val Ala Ala Lys Pro Val Asp Trp Glu Glu Ser Pro Leu Phe Asn Ser						
	485		490		495	
Leu Phe Pro Val Ser Asp Gly Ser Asn Tyr Phe Val Arg Leu Tyr Thr						
	500		505		510	
Glu Pro Leu Leu Val Asn Leu Pro Thr Pro Asp Phe Ser Met Pro Tyr						
	515		520		525	
Asn Val Ile Cys Leu Thr Cys Thr Val Val Ala Val Cys Tyr Gly Ser						
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Phe Tyr Asn Leu Leu Thr Arg Thr Phe His Ile Glu Glu Pro Arg Thr						
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<210> 5593

<211> 3078

<212> DNA

<213> Homo sapiens

<400> 5593

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<211> 296

<212> PRT

<213> Homo sapiens

<400> 5594

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Leu	Asp	Val	Ala	Leu	Glu	Asn	Leu	Asn	Leu	Lys	Glu	Ser	Asn	Lys	Gly
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<211> 1515

<212> DNA

<213> Homo sapiens

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<210> 5596
 <211> 299
 <212> PRT
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<400> 5596
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 35 40 45
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 Met Arg Val Glu Lys Phe Ile Tyr Glu Asn His Pro Asp Val Phe Ser
 65 70 75 80
 Asp Ser Ser Met Asp His Phe Gln Lys Phe Leu Pro Thr Val Gly Gly
 85 90 95
 Gln Leu Gly Thr Ala Gly Gln Gly Phe Ser Tyr Ser Lys Ser Asn Gly
 100 105 110
 Arg Gly Gly Ser Gln Ala Gly Gly Ser Gly Ser Ala Gly Gln Tyr Gly
 115 120 125
 Ser Asp Gln Gln His His Leu Gly Ser Gly Ser Gly Ala Gly Gly Thr
 130 135 140
 Gly Gly Pro Ala Gly Gln Ala Gly Arg Gly Gly Ala Ala Gly Thr Ala
 145 150 155 160
 Gly Val Gly Glu Thr Gly Ser Gly Asp Gln Ala Gly Gly Glu Gly Lys
 165 170 175
 His Ile Thr Val Phe Lys Thr Tyr Ile Ser Pro Trp Glu Arg Ala Met
 180 185 190
 Gly Val Asp Pro Gln Gln Lys Met Glu Leu Gly Ile Asp Leu Leu Ala
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 Tyr Gly Ala Lys Ala Glu Leu Pro Lys Tyr Lys Ser Phe Asn Arg Thr
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 Ala Met Pro Tyr Gly Gly Tyr Glu Lys Ala Ser Lys Arg Met Thr Phe
 225 230 235 240
 Gln Met Pro Lys Phe Asp Leu Gly Pro Leu Leu Ser Glu Pro Leu Val
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<210> 5597
 <211> 2240
 <212> DNA
 <213> Homo sapiens

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<210> 5598

<211> 312

<212> PRT

<213> Homo sapiens

<400> 5598

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<210> 5599

<211> 4492

<212> DNA

<213> Homo sapiens

<400> 5599

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<211> 923

<212> PRT

<213> Homo sapiens

<400> 5600

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Ala	Tyr	Val	Arg	Val	Leu	Asp	Leu	His	Lys	Lys	Pro	Phe	Leu	Ala	Lys
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Tyr	Phe	Pro	Phe	Met	Asp	Leu	Lys	Leu	Arg	Ala	Ala	Ser	Pro	Ile	Ile
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Thr	Leu	Val	Ala	Leu	Asp	Glu	Ala	Leu	Asp	Asn	Tyr	Thr	Ile	Thr	Phe
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Leu	Ile	Arg	Gly	Val	Ala	Ile	Gly	Gln	Thr	Ser	Leu	Thr	Ala	Ser	Val
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Thr	Asn	Lys	Ala	Gly	Gln	Arg	Ile	Asn	Ser	Ala	Pro	Gln	Gln	Ile	Glu
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Asn	Ile	Leu	Phe	Ser	Ile	Ser	Asn	Glu	Ser	Val	Ala	Leu	Val	Ser	Ala
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Ala	Gly	Leu	Val	Gln	Gly	Leu	Ala	Ile	Gly	Asn	Gly	Thr	Val	Ser	Gly
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Leu	Val	Gln	Ala	Val	Asp	Ala	Glu	Thr	Gly	Lys	Val	Val	Ile	Ile	Ser
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Ser Thr Ile Glu Val Ile Ala Gln Glu Pro Phe Gly Ala Asn Gln Thr
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Ile Ile Val Ala Val Lys Val Ser Pro Val Ser Tyr Leu Arg Val Ser
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Met Ser Pro Val Leu His Thr Gln Asn Lys Glu Ala Leu Val Ala Val
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Pro Leu Gly Met Thr Val Thr Phe Thr Val His Phe His Asp Asn Ser
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Arg Asp Asp Phe Val Gln Ile Gly Lys Gly Pro Thr Asn Asn Thr Cys
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Val Thr Val Ala Phe Val Met Asp Arg Arg Gly Pro Gly Pro Tyr Gly		
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Ala Ser Leu Phe Gln His Phe Leu Asp Ser Tyr Gln Val Met Phe Phe		
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Thr Leu Phe Ala Leu Leu Ala Gly Thr Ala Val Met Ile Ile Ala Tyr		
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<211> 670

<212> DNA

<213> Homo sapiens

<400> 5601

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1980

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<210> 5604
 <211> 560
 <212> PRT
 <213> Homo sapiens

<400> 5604
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 His Val Cys Arg Pro Pro Gly Asn Val Ser Gln Val Val Phe His Asn
 35 40 45
 His Ser Asn Trp Ser Leu Glu Asp Thr Gly Ala Leu Leu Ser Ser Gly
 50 55 60
 Gln Lys Asp Tyr Val Thr Val Gln Leu Gln Asn Gly Glu Ile Trp Glu
 65 70 75 80
 Leu Ser Arg Cys Ser Arg Asn Lys Arg Glu Asn Thr Ser Ser Leu Gly
 85 90 95
 Tyr Glu Tyr Thr Gly Ser Lys Lys Glu Phe Pro Cys Val Asp Gly Tyr
 100 105 110
 Ile Tyr Asp Gln Asn Thr Trp Lys Ser Thr Ala Val Thr Gln Trp Asn
 115 120 125
 Leu Val Cys Asp Arg Lys Trp Leu Ala Met Leu Ile Gln Pro Leu Phe
 130 135 140
 Met Phe Gly Val Leu Leu Gly Ser Val Thr Phe Gly Tyr Phe Ser Asp
 145 150 155 160
 Arg Leu Gly Arg Arg Val Val Leu Trp Ala Thr Ser Ser Ser Met Phe
 165 170 175
 Leu Phe Gly Ile Ala Ala Ala Phe Ala Val Asp Tyr Tyr Thr Phe Met
 180 185 190
 Ala Ala Arg Phe Phe Leu Ala Met Val Ala Ser Gly Tyr Leu Val Val
 195 200 205
 Gly Phe Val Tyr Val Met Glu Phe Ile Gly Met Lys Ser Arg Thr Trp
 210 215 220
 Ala Ser Val His Leu His Ser Phe Phe Ala Val Gly Thr Leu Leu Val
 225 230 235 240
 Ala Leu Thr Gly Tyr Leu Val Arg Thr Trp Trp Leu Tyr Gln Met Ile
 245 250 255
 Leu Ser Thr Val Thr Val Pro Phe Ile Leu Cys Cys Trp Val Leu Pro
 260 265 270
 Glu Thr Pro Phe Trp Leu Leu Ser Glu Gly Arg Tyr Glu Glu Ala Gln
 275 280 285
 Lys Ile Val Asp Ile Met Ala Lys Trp Asn Arg Ala Ser Ser Cys Lys
 290 295 300
 Leu Ser Glu Leu Leu Ser Leu Asp Leu Gln Gly Pro Val Ser Asn Ser
 305 310 315 320
 Pro Thr Glu Val Gln Lys His Asn Leu Ser Tyr Leu Phe Tyr Asn Trp
 325 330 335
 Ser Ile Thr Lys Arg Thr Leu Thr Val Trp Leu Ile Trp Phe Thr Gly

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          340          345          350
Ser Leu Gly Phe Tyr Ser Phe Ser Leu Asn Ser Val Asn Leu Gly Gly
          355          360          365
Asn Glu Tyr Leu Asn Leu Phe Leu Leu Gly Val Val Glu Ile Pro Ala
          370          375          380
Tyr Thr Phe Val Cys Ile Ala Met Asp Lys Val Gly Arg Arg Thr Val
385          390          395          400
Leu Ala Tyr Ser Leu Phe Cys Ser Ala Leu Ala Cys Gly Val Val Met
          405          410          415
Val Ile Pro Gln Lys His Tyr Ile Leu Gly Val Val Thr Ala Met Val
          420          425          430
Gly Lys Phe Ala Ile Gly Ala Ala Phe Gly Leu Ile Tyr Leu Tyr Thr
          435          440          445
Ala Glu Leu Tyr Pro Thr Ile Val Arg Ser Leu Ala Val Gly Ser Gly
          450          455          460
Ser Met Val Cys Arg Leu Ala Ser Ile Leu Ala Pro Phe Ser Val Asp
465          470          475          480
Leu Ser Ser Ile Trp Ile Phe Ile Pro Gln Leu Phe Val Gly Thr Met
          485          490          495
Ala Leu Leu Ser Gly Val Leu Thr Leu Lys Leu Pro Glu Thr Leu Gly
          500          505          510
Lys Arg Leu Ala Thr Thr Trp Glu Glu Ala Ala Lys Leu Glu Ser Glu
          515          520          525
Asn Glu Ser Lys Ser Ser Lys Leu Leu Leu Thr Thr Asn Asn Ser Gly
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<210> 5605
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 5605
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<210> 5606
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 5606

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Met Thr Arg Ala Leu Leu Thr Ser Leu Val Leu Leu Pro Ala Arg Gln
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      20           25           30
Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Ser Ser
      35           40           45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
      50           55           60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
65           70           75           80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
      85           90           95
Phe Pro Phe Thr Arg
      100

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<210> 5607

<211> 320

<212> DNA

<213> Homo sapiens

<400> 5607

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120
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180
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240
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caagccgggc ggcttcagca
320

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<210> 5608

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5608

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Val His Thr Arg Gly Ile Gly Ser Arg Leu Leu Thr Lys Met Gly Tyr
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Glu Phe Gly Lys Gly Leu Gly Arg His Ala Glu Gly Arg Val Glu Pro
      20           25           30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35           40           45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50           55           60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
65           70           75           80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
      85           90           95
Pro Gly Ala Leu Gln Ala Gly Arg Pro Gln

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100

105

<210> 5609

<211> 1843

<212> DNA

<213> Homo sapiens

<400> 5609

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120
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240
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gttattgtaa ttctgaatgt actcatcgtg ttctctactt ctacagaagc atcctcagt
360
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420
cacaacccta tctagccaaa cccagaagaa cgcaggcgct tacacaactt ttctcggaca
480
gtcgagaaaa tccaaaagtg ggctttgggc ttacctaaa taggaatgga atgtaccact
540
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720
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1680
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1740
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1843

<210> 5610
<211> 153
<212> PRT
<213> Homo sapiens

<400> 5610
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20 25 30
Phe Thr Gly Gly Arg Gln Asp His Thr Ser Leu Pro His Trp Ala Cys
35 40 45
Leu Leu Val Asp Ser Cys Met Gln Glu Ala Val Met Gly Ser Leu Arg
50 55 60
Ile Pro Gln Cys Gly Asn Gly Pro Leu Arg Leu Val Leu Arg Val Pro
65 70 75 80
Gly Ala Gln Ser Trp Val Gly Gly Cys Trp Trp Glu Val Arg Asn Lys
85 90 95
Phe Trp Leu Pro Ser Gly Gln Leu Pro Thr Ala Leu Thr Trp Glu Val
100 105 110
Asp Ala His Arg Gln Asp Ala Leu Gly Tyr Cys Cys Thr Val Leu His
115 120 125
Glu Ile Phe Ile Gln Pro Thr Arg Phe Asn Arg Ser Leu Gly Ser Ser
130 135 140
Ser Arg Leu Leu Cys Leu Phe Lys His
145 150

<210> 5611
<211> 1152
<212> DNA
<213> Homo sapiens

<400> 5611
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120

cgggtcctgg cgcctcagag cccggcccag gccgcggaac ggtgatgctc gggccggacg
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 1152

<210> 5612

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5612

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			20					25					30		
Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln	Ser	Arg	Gln
			35				40					45			
Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu	Leu	Arg	Gln	Lys
			50			55					60				
Asn	Ala	Val	Leu	Asn	Lys	Leu	Lys	Thr	Ala	Ile	Gly	Ala	Val	Glu	Lys
65				70				75						80	
Asp	Val	Gly	Leu	Ser	Asp	Glu	Glu	Lys	Leu	Phe	Gln	Val	His	Thr	Phe

				85					90					95					
Glu	Ile	Phe	Gln	Lys	Glu	Leu	Asn	Glu	Ser	Glu	Asn	Ser	Val	Phe	Gln				
			100					105					110						
Ala	Val	Tyr	Gly	Leu	Gln	Arg	Ala	Leu	Gln	Gly	Asp	Tyr	Lys	Asp	Val				
		115					120				125								
Val	Asn	Met	Lys	Glu	Ser	Ser	Arg	Gln	Arg	Leu	Glu	Ala	Leu	Arg	Glu				
	130					135				140									
Ala	Ala	Ile	Lys	Glu	Glu	Thr	Glu	Tyr	Met	Glu	Leu	Leu	Ala	Ala	Glu				
145				150				155							160				
Lys	His	Gln	Val	Glu	Ala	Leu	Lys	Asn	Met	Gln	His	Gln	Asn	Gln	Ser				
		165					170			175									
Leu	Ser	Met	Leu	Asp	Glu	Ile	Leu	Glu	Asp	Val	Arg	Lys	Ala	Ala	Asp				
	180					185				190									
Arg	Leu	Glu	Glu	Glu	Ile	Glu	Glu	His	Ala	Phe	Asp	Asp	Asn	Lys	Ser				
	195					200				205									
Val	Lys	Gly	Val	Asn	Phe	Glu	Ala	Val	Leu	Arg	Val	Glu	Glu	Glu	Glu				
	210					215				220									
Ala	Asn	Ser	Lys	Gln	Asn	Ile	Thr	Lys	Arg	Glu	Val	Glu	Asp	Asp	Leu				
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Val	Leu	Ser	Met	Leu	Ile	Asp	Ser	Gln	Asn	Asn	Gln	Tyr	Ile	Leu	Thr				
		245				250				255									
Lys	Pro	Arg	Asp	Ser	Thr	Ile	Pro	Arg	Ala	Asp	His	His	Phe	Ile	Lys				
		260				265				270									
Asp	Ile	Val	Thr	Ile	Gly	Met	Leu	Ser	Leu	Pro	Cys	Gly	Trp	Arg	Cys				
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Thr

<210> 5613

<211> 1679

<212> DNA

<213> Homo sapiens

<400> 5613

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120

ctcagaccct gtgggggtcaa gtcggcggtg gaggcctag gctcagcctg tggggaccgg
180

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240

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300

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360

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420

cctgcaaatt gggaagccaa aaaagctcgt ttggagtggg aactaaagga agaggaaaag
480

aaaaaggaat gtgcggcaag aggagaagac tatgagaaag tgaagttgct ggagatcagt
540

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600

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 1679

<210> 5614

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5614

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Ser	Leu	Ala	Ala	Ala	Ala	Glu	Leu	Ala	Ala	Gln	Lys	Arg	Glu	Gln	Arg
			20					25					30		
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
		35					40				45				
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
	50					55				60					
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
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<211> 507

<212> PRT

<213> Homo sapiens

<400> 5616

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<211> 3480

<212> DNA

<213> Homo sapiens

<400> 5617

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 <212> PRT
 <213> Homo sapiens

<400> 5618
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Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly		845
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Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His		895
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Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr		925
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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35 40 45
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 Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
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 Thr Gly

<210> 5623

<211> 357

<212> DNA

<213> Homo sapiens

<400> 5623

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 120
 cgggtcaatgc ctctgggagc aaggatcctt tccacgggtg tgttctatgc cgggggcttt
 180
 gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
 240
 gtggagcagc tgcagagcca tcccagggca caggaagctc tgggccctcc tctcaacatc
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 357

<210> 5624

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5624

Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
 1 5 10 15
 Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
 20 25 30
 Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
 35 40 45
 Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
 50 55 60
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu
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<210> 5625

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 5625

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 120
 cgcacgcagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac
 180
 agcgagcagg cgcgagcca cctggagaag gcgtggttga tatcacagca aatcccacag
 240
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 300
 tccgttgatg cagcaaagcc gctgctgcgg aaggcgatcc agatctcaca gcagacccca
 360
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 420
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 480
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 600
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 660
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 720
 accatctcca cactgcacga tgatgagatc ctgcccagca acccgctga cctcttccac
 780
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 900
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 1017

<210> 5626

<211> 339

<212> PRT

<213> Homo sapiens

<400> 5626

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Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
		35					40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
	50					55					60				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70					75				80	
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
			85						90					95	
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100					105						110	
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

115 120 125
 Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys
 130 135 140
 Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu
 145 150 155 160
 Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met
 165 170 175
 Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln
 180 185 190
 Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg
 195 200 205
 Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln
 210 215 220
 Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln
 225 230 235 240
 Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala
 245 250 255
 Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr
 260 265 270
 Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala
 275 280 285
 Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met
 290 295 300
 Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu
 305 310 315 320
 His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu
 325 330 335
 Gln Glu Ile

<210> 5627
 <211> 1401
 <212> DNA
 <213> Homo sapiens

<400> 5627
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 120
 aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgaccctca
 180
 catctgttcc tcgcgccccca gatggcttct gctgcctgct ccatggaccc catcgacagc
 240
 tttgagctcc tggatctcct gtttgaccgg caggacggca tcctgagaca cgtggagctg
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 ggcgagggct ggggtcacgt caaggaccag gtccctgccaa accccgactc tgacgacttc
 360
 ctcagctcca tcctgggctc tggagactca ctgcccagct cccactctg gtcccccgaa
 420
 ggcagtgata gtggcatctc cgaagacctc ccctccgacc cccaggacac ccctccacgc
 480
 agcggaccag ccacctcccc cgccggctgc catcctgccc agcctggcaa ggggcctgc
 540

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 720
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 780
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 840
 cggtcctgtt gctgtccttt gccctcatca tcctccctc catcagccct tttggcccca
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 960
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 1380
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<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
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Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
		20					25					30			
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
	35					40					45				
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50				55						60				
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65			70					75					80		
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
		85					90					95			
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
		100					105					110			
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
	115					120					125				
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

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      130              135              140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
145              150              155              160
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
      165              170              175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
      180              185              190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
      195              200              205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
      210              215              220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
225              230              235              240
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
      245              250              255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
      260              265              270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
      275              280              285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
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<210> 5629
 <211> 428
 <212> DNA
 <213> Homo sapiens

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<400> 5629
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120
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300
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428

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<210> 5630
 <211> 110
 <212> PRT
 <213> Homo sapiens

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<400> 5630
Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
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Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

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 Ala Gly Ala Gly Ala Gly His Leu Thr Pro Gln Ala Ser Pro Thr Ser
 20 25 30
 Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val
 35 40 45
 Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg
 50 55 60
 Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Pro Thr Ser Ser Ser
 65 70 75 80
 Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro
 85 90 95
 Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys
 100 105 110
 Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr
 115 120 125
 Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser
 130 135 140
 Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser
 145 150 155 160
 Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln
 165 170 175
 Glu Arg Thr His Thr Thr Val
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<210> 5633

<211> 2181

<212> DNA

<213> Homo sapiens

<400> 5633

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 420
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 660
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 720

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2181

<210> 5634

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5634

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           20           25           30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
           35           40           45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
           50           55           60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
65           70           75           80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
           85           90           95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
           100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
           115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
           130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
           165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
           180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
           195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
           210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
           245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
           260          265          270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
           275          280          285
Glu

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<210> 5635

<211> 614

<212> DNA

<213> Homo sapiens

<400> 5635

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120
gcactcatca atgggtgatga aaacctggcc tgccaaatat atgaaaacaa tcctcagcta
180

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aaagaatctc ttgatccaaa tacatcttat ggggagccct accagcacia tactccatta
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 300
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 360
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 420
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 480
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 600
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 614

<210> 5636
 <211> 204
 <212> PRT
 <213> Homo sapiens

<400> 5636
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 Gly Lys Lys Cys His Cys Leu Ser Glu Lys Thr Lys Gln Asn Met Gly
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 Asn Thr Thr Thr Lys Phe Arg Lys Ala Leu Ile Asn Gly Asp Glu Asn
 35 40 45
 Leu Ala Cys Gln Ile Tyr Glu Asn Asn Pro Gln Leu Lys Glu Ser Leu
 50 55 60
 Asp Pro Asn Thr Ser Tyr Gly Glu Pro Tyr Gln His Asn Thr Pro Leu
 65 70 75 80
 His Tyr Ala Ala Arg His Gly Met Asn Lys Ile Leu Gly Asp Asp Phe
 85 90 95
 Arg Arg Ala Asp Cys Leu Gln Met Ile Leu Lys Trp Lys Gly Ala Lys
 100 105 110
 Leu Asp Gln Gly Glu Tyr Glu Arg Ala Ala Ile Asp Ala Val Asp Asn
 115 120 125
 Lys Lys Asn Thr Pro Leu His Tyr Ala Ala Ala Ser Gly Met Lys Ala
 130 135 140
 Cys Val Glu Lys His Gly Gly Asp Leu Phe Ala Glu Asn Glu Asn Lys
 145 150 155 160
 Asp Thr Pro Cys Asp Cys Ala Glu Lys Gln His His Lys Asp Leu Ala
 165 170 175
 Leu Asn Leu Glu Ser Gln Met Val Phe Ser Arg Asp Pro Glu Ala Glu
 180 185 190
 Glu Ile Glu Ala Glu Tyr Ala Ala Leu Asp Lys Arg
 195 200

<210> 5637
 <211> 825
 <212> DNA
 <213> Homo sapiens

<400> 5637

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 120
 ccaggtactc agggccctgc cctcgtggcc ttgtccgctc gccgcgggtg gggctggcac
 180
 aaggcccgtt ttggaggaag tggaggctcc caggagaaag gcagtggctg tgatcgaca
 240
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 420
 aatatataat aagagcgatt cccacagccc cacggtgctg gccagcctca caggtgcccg
 480
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 540
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 600
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 cccagcctgg gatccgtccg ctgtctgtct cctgaaccag ggagtctgac ccactcacag
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<210> 5638

<211> 132

<212> PRT

<213> Homo sapiens

<400> 5638

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Leu	Asn	Ile	Asn	Lys	Ser	Asp	Ser	His	Ser	Pro	Thr	Val	Leu	Ala	Ser
			20					25					30		
Leu	Thr	Gly	Ala	Arg	Trp	Phe	Cys	Asp	Pro	Ser	Gln	Ala	His	Ala	Pro
		35					40					45			
Leu	Ala	Gly	Arg	Leu	Ala	Arg	Ala	Pro	Leu	Trp	Leu	Ala	Cys	Gly	Asp
	50					55				60					
Thr	Trp	Ala	Leu	Leu	His	Val	Pro	Thr	Arg	Ala	Val	Ala	Gly	Ser	Lys
65					70				75					80	
Glu	Ala	Gln	Pro	Arg	Pro	Ala	Cys	Val	Asp	Pro	Ala	Gly	Leu	Arg	Ala
				85				90					95		
Pro	Glu	Leu	Leu	Thr	Val	Ser	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Arg	Arg
			100					105					110		
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130

<210> 5639

<211> 2433

<212> DNA

<213> Homo sapiens

<400> 5639

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<211> 540

<212> PRT

<213> Homo sapiens

<400> 5640

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Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser	Ser	Glu	Val	Glu	Asp	Pro	Pro
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Leu	Glu	Thr	Tyr	Gly	Cys	Gln	Met	Asn	Val	Asn	Asp	Thr	Glu	Ile	Ala
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4820

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<211> 202

<212> PRT

<213> Homo sapiens

<400> 5644

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Gln	Glu	Tyr	Ser	Phe	Gly	Pro	Ser	Ala	Val	Leu	Gly	Asp	Phe	Gly	Ser
			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
		35					40					45			
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
		50				55					60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
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Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
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Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
145          150          155          160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
          165          170          175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
          180          185          190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
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<210> 5645
 <211> 156
 <212> DNA
 <213> Homo sapiens

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 156

<210> 5646
 <211> 52
 <212> PRT
 <213> Homo sapiens

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<400> 5646
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Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
          35          40          45
Val Tyr His Ala
          50

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<210> 5647
 <211> 150
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 <213> Homo sapiens

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 <212> PRT
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 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly
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 His Pro
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<210> 5649
 <211> 345
 <212> DNA
 <213> Homo sapiens

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<210> 5650
 <211> 100
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser
 35 40 45
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg
 50 55 60
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His
 65 70 75 80
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala
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 Gly Val Ser Gln

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<210> 5651
 <211> 615
 <212> DNA
 <213> Homo sapiens

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 480
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<210> 5652
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 5652
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 Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala
 35 40 45
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu
 50 55 60
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys
 65 70 75 80
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp
 85 90 95
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu
 100 105 110
 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu
 115 120 125
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

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<210> 5653
 <211> 1439
 <212> DNA
 <213> Homo sapiens

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<211> 245

<212> PRT

<213> Homo sapiens

<400> 5654

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			20					25					30		
Tyr	Gly	Ile	Pro	Gly	Met	Pro	Gly	Leu	Pro	Gly	Ala	Pro	Gly	Lys	Asp
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Gly	Tyr	Asp	Gly	Leu	Pro	Gly	Pro	Lys	Gly	Glu	Pro	Gly	Ile	Pro	Ala
	50					55				60					
Ile	Pro	Gly	Ile	Arg	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Glu	Pro	Gly	Leu
65				70					75					80	
Pro	Gly	His	Pro	Gly	Lys	Asn	Gly	Pro	Met	Gly	Pro	Pro	Gly	Met	Pro
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Gly	Val	Pro	Gly	Pro	Met	Gly	Ile	Pro	Gly	Glu	Pro	Gly	Glu	Glu	Gly
		100						105				110			
Arg	Tyr	Lys	Gln	Lys	Phe	Gln	Ser	Val	Phe	Thr	Val	Thr	Arg	Gln	Thr
	115					120					125				
His	Gln	Pro	Pro	Ala	Pro	Asn	Ser	Leu	Ile	Arg	Phe	Asn	Ala	Val	Leu
	130					135					140				
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Lys	Val	Pro	Gly	Leu	Tyr	Tyr	Phe	Val	Tyr	His	Ala	Ser	His	Thr	Ala
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Asn	Leu	Cys	Val	Leu	Leu	Tyr	Arg	Ser	Gly	Val	Lys	Val	Val	Thr	Phe
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Cys	Gly	His	Thr	Ser	Lys	Thr	Asn	Gln	Val	Asn	Ser	Gly	Gly	Val	Leu
	195					200					205				
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	210				215					220					
Tyr	Asp	Met	Val	Gly	Ile	Gln	Gly	Ser	Asp	Ser	Val	Phe	Ser	Gly	Phe
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<212> DNA

<213> Homo sapiens

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<210> 5656

<211> 987

<212> PRT

<213> Homo sapiens

<400> 5656

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			20					25					30		
Ala	Glu	Val	Arg	Arg	Glu	Trp	Ala	Lys	Tyr	Met	Glu	Val	His	Glu	Lys
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Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His	Val
	50					55					60				
Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala	Ala
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Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln	Asn
				85					90					95	
Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg	Val
			100					105					110		
Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile	Thr
		115					120					125			
Ala	Ser	Leu	Val	Thr	Thr	Asp	His	Ser	Glu	Met	Lys	Lys	Leu	Phe	Glu
	130					135					140				
Glu	Gln	Leu	Lys	Lys	Tyr	Asp	Gln	Leu	Lys	Val	Tyr	Leu	Glu	Gln	Asn
145					150					155				160	
Leu	Ala	Ala	Gln	Asp	Arg	Val	Leu	Cys	Ala	Leu	Thr	Glu	Ala	Asn	Val
			165						170					175	
Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys	Trp
		180						185					190		
Asn	Ser	Thr	Leu	Gln	Thr	Leu	Val	Ala	Ser	Tyr	Glu	Ala	Tyr	Glu	Asp
		195					200					205			
Leu	Met	Lys	Lys	Ser	Gln	Glu	Gly	Arg	Asp	Phe	Tyr	Ala	Asp	Leu	Glu
	210					215					220				
Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala

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225          230          235          240
Arg Glu Ala Ala Arg Gln Gln Leu Leu Asp Arg Glu Leu Lys Lys Lys
          245          250          255
Pro Pro Pro Arg Pro Thr Ala Pro Lys Pro Leu Leu Pro Arg Arg Glu
          260          265          270
Glu Ser Glu Ala Val Glu Ala Gly Asp Pro Pro Glu Glu Leu Arg Ser
          275          280          285
Leu Pro Pro Asp Met Val Ala Gly Pro Arg Leu Pro Asp Thr Phe Leu
          290          295          300
Gly Ser Ala Thr Pro Leu His Phe Pro Pro Ser Pro Phe Pro Ser Ser
305          310          315          320
Thr Gly Pro Gly Pro His Tyr Leu Ser Gly Pro Leu Pro Pro Gly Thr
          325          330          335
Tyr Ser Gly Pro Thr Gln Leu Ile Gln Pro Arg Ala Pro Gly Pro His
          340          345          350
Ala Met Pro Val Ala Pro Gly Pro Ala Leu Tyr Pro Ala Pro Ala Tyr
          355          360          365
Thr Pro Glu Leu Gly Leu Val Pro Arg Ser Ser Pro Gln His Gly Val
          370          375          380
Val Ser Ser Pro Tyr Val Gly Val Gly Pro Ala Pro Pro Val Ala Gly
385          390          395          400
Leu Pro Ser Ala Pro Pro Pro Gln Phe Ser Gly Pro Glu Leu Ala Met
          405          410          415
Ala Val Arg Pro Ala Thr Thr Thr Val Asp Ser Ile Gln Ala Pro Ile
          420          425          430
Pro Ser His Thr Ala Pro Arg Pro Asn Pro Thr Pro Ala Pro Pro Pro
          435          440          445
Pro Cys Phe Pro Val Pro Pro Pro Gln Pro Leu Pro Thr Pro Tyr Thr
          450          455          460
Tyr Pro Ala Gly Ala Lys Gln Pro Ile Pro Ala Gln His His Phe Ser
465          470          475          480
Ser Gly Ile Pro Thr Gly Phe Pro Ala Pro Arg Ile Gly Pro Gln Pro
          485          490          495
Gln Pro His Pro Gln Pro His Pro Ser Gln Ala Phe Gly Pro Gln Pro
          500          505          510
Pro Gln Gln Pro Leu Pro Leu Gln His Pro His Leu Phe Pro Pro Gln
          515          520          525
Ala Pro Gly Leu Leu Pro Pro Gln Ser Pro Tyr Pro Tyr Ala Pro Gln
          530          535          540
Pro Gly Val Leu Gly Gln Pro Pro Pro Pro Leu His Thr Gln Leu Tyr
545          550          555          560
Pro Gly Pro Ala Gln Asp Pro Leu Pro Ala His Ser Gly Ala Leu Pro
          565          570          575
Phe Pro Ser Pro Gly Pro Pro Gln Pro Pro His Pro Pro Leu Ala Tyr
          580          585          590
Gly Pro Ala Pro Ser Thr Arg Pro Met Gly Pro Gln Ala Ala Pro Leu
          595          600          605
Thr Ile Arg Gly Pro Ser Ser Ala Gly Gln Ser Thr Pro Ser Pro His
          610          615          620
Leu Val Pro Ser Pro Ala Pro Ser Pro Gly Pro Gly Pro Val Pro Pro
625          630          635          640
Arg Pro Pro Ala Ala Glu Pro Pro Pro Cys Leu Arg Arg Gly Ala Ala
          645          650          655
Ala Ala Asp Leu Leu Ser Ser Ser Pro Glu Ser Gln His Gly Gly Thr

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660 665 670
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 675 680 685
 Ala Ala Glu Gly Arg Arg Pro Gln Ala Leu Arg Leu Ile Glu Arg Asp
 690 695 700
 Pro Tyr Glu His Pro Glu Arg Leu Arg Gln Leu Gln Gln Glu Leu Glu
 705 710 715 720
 Ala Phe Arg Gly Gln Leu Gly Asp Val Gly Ala Leu Asp Thr Val Trp
 725 730 735
 Arg Glu Leu Gln Asp Ala Gln Glu His Asp Ala Arg Gly Arg Ser Ile
 740 745 750
 Ala Ile Ala Arg Cys Tyr Ser Leu Lys Asn Arg His Gln Asp Val Met
 755 760 765
 Pro Tyr Asp Ser Asn Arg Val Val Leu Arg Ser Gly Lys Asp Asp Tyr
 770 775 780
 Ile Asn Ala Ser Cys Val Glu Gly Leu Ser Pro Tyr Cys Pro Pro Leu
 785 790 795 800
 Val Ala Thr Gln Ala Pro Leu Pro Gly Thr Ala Ala Asp Phe Trp Leu
 805 810 815
 Met Val His Glu Gln Lys Val Ser Val Ile Val Met Leu Val Ser Glu
 820 825 830
 Ala Glu Met Glu Lys Gln Lys Val Ala Arg Tyr Phe Pro Thr Glu Arg
 835 840 845
 Gly Gln Pro Met Val His Gly Ala Leu Ser Leu Ala Leu Ser Ser Val
 850 855 860
 Arg Ser Thr Glu Thr His Val Glu Arg Val Leu Ser Leu Gln Phe Arg
 865 870 875 880
 Asp Gln Ser Leu Lys Arg Ser Leu Val His Leu His Phe Pro Thr Trp
 885 890 895
 Pro Glu Leu Gly Leu Pro Asp Ser Pro Ser Asn Leu Leu Arg Phe Ile
 900 905 910
 Gln Glu Val His Ala His Tyr Leu His Gln Arg Pro Leu His Thr Pro
 915 920 925
 Ile Ile Val His Cys Ser Ser Gly Val Gly Arg Thr Gly Ala Phe Ala
 930 935 940
 Leu Leu Tyr Ala Ala Val Gln Glu Val Glu Ala Gly Asn Gly Ile Pro
 945 950 955 960
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 965 970 975
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<210> 5657
 <211> 1020
 <212> DNA
 <213> Homo sapiens

<400> 5657
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 120
 gcctcgggct atgggaccca gaacattcga ctgagccggg atgccgtgaa ggacttcgac
 180

tgetgttgtc tctccctgca gccttgccac gatcctgttg tcaccccaga tggctacctg
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 480
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 540
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 720
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<210> 5658

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5658

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His	Glu	Lys	Lys	Lys	Asp	Thr	Ala	Ala	Ser	Gly	Tyr	Gly	Thr	Gln	Asn
			20					25					30		
Ile	Arg	Leu	Ser	Arg	Asp	Ala	Val	Lys	Asp	Phe	Asp	Cys	Cys	Cys	Leu
		35					40					45			
Ser	Leu	Gln	Pro	Cys	His	Asp	Pro	Val	Val	Thr	Pro	Asp	Gly	Tyr	Leu
	50					55					60				
Tyr	Glu	Arg	Glu	Ala	Ile	Leu	Glu	Tyr	Ile	Leu	His	Gln	Lys	Lys	Glu
65					70				75					80	
Ile	Ala	Arg	Gln	Met	Lys	Ala	Tyr	Glu	Lys	Gln	Arg	Gly	Thr	Arg	Arg
			85					90					95		
Glu	Glu	Gln	Lys	Glu	Leu	Gln	Arg	Ala	Ala	Ser	Gln	Asp	His	Val	Arg
			100					105					110		
Gly	Phe	Leu	Glu	Lys	Glu	Ser	Ala	Ile	Val	Ser	Arg	Pro	Leu	Asn	Pro
		115					120					125			
Phe	Thr	Ala	Lys	Ala	Leu	Ser	Gly	Thr	Ser	Pro	Asp	Asp	Val	Gln	Pro
	130					135					140				
Gly	Pro	Ser	Val	Gly	Pro	Pro	Ser	Lys	Asp	Lys	Asp	Lys	Val	Leu	Pro

145		150		155		160									
Ser	Phe	Trp	Ile	Pro	Ser	Leu	Thr	Pro	Glu	Ala	Lys	Ala	Thr	Lys	Leu
				165					170					175	
Glu	Lys	Pro	Ser	Arg	Thr	Val	Thr	Cys	Pro	Met	Ser	Gly	Lys	Pro	Leu
			180					185					190		
Arg	Met	Ser	Asp	Leu	Thr	Pro	Val	His	Phe	Thr	Pro	Leu	Asp	Ser	Ser
		195					200					205			
Val	Asp	Arg	Val	Gly	Leu	Ile	Thr	Arg	Ser	Glu	Arg	Tyr	Val	Cys	Ala
	210					215					220				
Val	Thr	Arg	Asp	Ser	Leu	Ser	Asn	Ala	Thr	Pro	Cys	Ala	Val	Leu	Arg
225					230					235				240	
Pro	Ser	Gly	Ala	Val	Val	Thr	Leu	Glu	Cys	Val	Glu	Lys	Leu	Ile	Arg
			245						250					255	
Lys	Asp	Met	Val	Asp	Pro	Val	Thr	Gly	Asp	Lys	Leu	Thr	Asp	Arg	Asp
		260						265					270		
Ile	Ile	Val	Leu	Gln	Arg	Gly	Gly	Thr	Gly	Phe	Ala	Gly	Ser	Gly	Val
		275					280						285		
Lys	Leu	Gln	Ala	Glu	Lys	Ser	Arg	Pro	Val	Met	Gln	Ala			
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<210> 5659
 <211> 1263
 <212> DNA
 <213> Homo sapiens

<400> 5659
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 180
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 1263

<210> 5660
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 5660
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 35 40 45
 Glu Asn Asp Thr Asp Leu Asp Leu Arg Tyr Asp Thr Pro Glu Pro Tyr
 50 55 60
 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln
 65 70 75 80
 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys
 85 90 95
 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr
 100 105 110
 Val Lys Leu Asn Leu Leu Ile Thr Gly Lys Ile Val Asp His Gly Asn
 115 120 125
 Gly Thr Phe Ser Val Tyr Phe Arg His Asn Ser Thr Gly Gln Gly Asn
 130 135 140
 Val Ser Val Ser Leu Val Pro Pro Thr Lys Ile Val Glu Phe Asp Leu
 145 150 155 160
 Ala Gln Gln Thr Val Ile Asp Ala Lys Asp Ser Lys Ser Phe Asn Cys
 165 170 175
 Arg Ile Glu Tyr Glu Lys Val Asp Lys Ala Thr Lys Asn Thr Leu Cys
 180 185 190
 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His
 195 200 205
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile
 210 215 220
 Ser Phe Tyr Ser Thr Asp Tyr Lys Leu Val Gln Lys Val Cys Pro Asp
 225 230 235 240
 Tyr Asn Tyr His Ser Asp Thr Pro Tyr Phe Pro Ser Gly

245

250

<210> 5661

<211> 578

<212> DNA

<213> Homo sapiens

<400> 5661

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 180
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 240
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 300
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 420
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 480
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 578

<210> 5662

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5662

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			20					25					30		
Gly	Pro	Ile	Thr	Gln	Cys	Thr	Ala	Arg	Thr	Gln	Gln	Glu	Ala	Pro	Ala
			35				40					45			
Thr	Gly	Pro	Asp	Leu	Pro	His	Pro	Gly	Pro	Asp	Gly	His	Leu	Asp	Thr
			50			55					60				
His	Ser	Gly	Leu	Ser	Ser	Asn	Ser	Ser	Met	Thr	Thr	Arg	Glu	Leu	Gln
65					70				75					80	
Gln	Tyr	Trp	Gln	Asn	Gln	Lys	Cys	Arg	Trp	Lys	His	Val	Lys	Leu	Leu
			85					90					95		
Phe	Glu	Ile	Ala	Ser	Ala	Arg	Ile	Glu	Glu	Arg	Lys	Val	Ser	Lys	Phe
			100					105					110		
Val	Met	Gly	Lys	Ser	Arg	Pro	Gly	Glu	Met	Thr	Tyr	Pro	Gly	Ser	Arg
			115				120					125			
Gly	Glu	Thr	Gly	Thr	Ala	Pro	Glu	Pro	Asp	Pro	Arg	Cys	Pro	Arg	Gln
			130			135					140				
Ser	Asp	Met	Leu												

145

<210> 5663

<211> 857

<212> DNA

<213> Homo sapiens

<400> 5663

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240
ggctgtcttc accttcttta gttccttctg tagctcagac tcggccacca caacctcctt
300
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420
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480
cttaggatag gggaggtttc gaatccgcca ctggaaactc atcttggtgt ccttgcgcat
540
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600
gggcgctggg tctcctactt caagctgcca ctggcccatg gctcccaggg cacttttcac
660
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720
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780
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840
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857

<210> 5664

<211> 203

<212> PRT

<213> Homo sapiens

<400> 5664

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Ala	Leu	Leu	Gln	Asp	Gly	Arg	Arg	Lys	Val	His	Tyr	Leu	Phe	Pro	Asp
			20					25					30		
Gly	Lys	Glu	Met	Ala	Glu	Glu	Tyr	Asp	Glu	Lys	Thr	Ser	Glu	Leu	Leu
		35					40					45			
Val	Arg	Lys	Trp	Arg	Val	Lys	Ser	Ala	Leu	Gly	Ala	Met	Gly	Gln	Trp
	50					55					60				
Gln	Leu	Glu	Val	Gly	Asp	Pro	Ala	Pro	Leu	Gly	Ala	Gly	Asn	Leu	Gly

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65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
          85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
          100         105         110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
          115         120         125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
          130         135         140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
145         150         155         160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
          165         170         175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
          180         185         190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
          195         200

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<210> 5665
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 5665
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 120
 cagcggccct ctgaagtcac ttgcttcacg gaggtgttac tgtctgctgc tggacagagc
 180
 atgatggggg ctgcaagggc tccctcaaac cctggactcc tccaacagag ggctcctggg
 240
 tgccaggtc agctctgcc tgcgtcggcc ccagggcgta gggaggggtgt ttaatcctgg
 300
 cccgggcctt cccgcaggt ggagcgcgtg tcgcaccgc tgctgcagca gcagtatgag
 360
 ctgtaccggg agcgctgct gcagcgatgc gagcggcgcc cggtggagca ggtgctgtac
 420
 cacggcacga cggcaccggc agtgctgac atctgcgccc acggcttcaa ccgcagcttc
 480
 tgcgcccgca acgccacggt ctacgggaag ggcgtgtatt tcgccaggcg c
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<210> 5666
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 5666
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 1 5 10 15
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 20 25 30
 Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

35 40 45
 Ala Val Pro Asp Ile Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly
 50 55 60
 Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg
 65 70 75

<210> 5667
 <211> 858
 <212> DNA
 <213> Homo sapiens

<400> 5667
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 120
 tttgagaagt taagaatgat ttccaaggaa atccgccaaag ttgttcgaat gacttctgct
 180
 aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaaattca
 240
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 300
 aatgccaaaga agctatatga ggatgcccaa atggcaagga aggtgaagca gtatctttcc
 360
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 420
 gcatatggta cctgtgagta caagttttca tttatgtgac gctaaagagc acaacaaaat
 480
 aaaaacttat ttctctagaa ttatacctaa gtcccaagaa aattaacttt cactcacaaa
 540
 agattgctgg cataccttaa gcatcatgtg atccaattaa tcacagactg aatcccatcc
 600
 attcctgatg gctacactat ccaaaaaata gagggataag tagatcttta aaaagctttt
 660
 taattctttt aaaaactgga tcattataga ggaggctttc tgtttgagaa catttttata
 720
 ttcaccccta aagagtaaac ataagtggaa tttttacctc tttttatttc atggataata
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 840
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 858

<210> 5668
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 5668
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 20 25 30
 Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

35 40 45
 Lys Glu Ile Arg Gln Val Val Arg Met Thr Ser Ala Asn Met Asp Pro
 50 55 60
 Ala Met Met Phe Arg Gln Arg Ser Leu Ser Gln Gly Ser Thr Asn Ser
 65 70 75 80
 Asn Met Leu Asp Val Gln Gly Gly Ala His Lys Lys Arg Ala Arg Arg
 85 90 95
 Ser Ser Leu Leu Asn Ala Lys Lys Leu Tyr Glu Asp Ala Gln Met Ala
 100 105 110
 Arg Lys Val Lys Gln Tyr Leu Ser Ser Leu Asp Val Glu Thr Asp Glu
 115 120 125
 Glu Lys Phe Gln Met Met Ser Leu Gln Xaa Glu Pro Ala Tyr Gly Thr
 130 135 140
 Cys Glu Tyr Lys Phe Ser Phe Met
 145 150

<210> 5669
 <211> 1842
 <212> DNA
 <213> Homo sapiens

<400> 5669
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 120
 gccatgatgc gcagctccat agagaggggc aaatgggtct tcttccagaa ctgccacctg
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 240
 cacagggact tccgctctg gctcaccagc ctgcccagca acaagttccc agtgtccatc
 300
 ctgcagaacg gctccaagat gaccattgag ccgccacgcg gtgtcagggc caacctgctg
 360
 aagtcctata gtagccttgg tgaagacttc ctcaactcct gccacaaggt gatggagttc
 420
 aagtctctgc tgctgtctct gtgcttgctc catgggaacg ccctggagcg ccgtaagttt
 480
 gggcccctgg gcttcaacat cccctatgag ttcacggatg gagatctgcg catctgcatc
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 600
 acggcagggg agatcaatta cgggggcccgt gtcactgatg actgggaccg gcgctgcatc
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 720
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 780
 atcaagagcc tcccactcaa tgatatgcct gagatctttg gcctgcatga caatgccaac
 840
 atcacctttg ccagaaacga gacgttcgcc ctctggggca ccatcatcca gctgcaaccc
 900
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 960

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 1020
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 1080
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 1140
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 1200
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 1260
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 1320
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 1380
 tttgtcatct ccattgacac catctccttt gatttcaagg tgatgtttga ggcaccatca
 1440
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 1620
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 1680
 accaactatg tcattgctgt ggagatcccc acccatcagc cccagcgaca ctggataaag
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 1842

<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

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			20					25					30		
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
		35					40				45				
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
	50					55					60				
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
65					70					75				80	
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
			85						90					95	
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
			100					105					110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
		115				120							125		
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

130 135 140
Leu Ser Leu Cys Leu Phe His Gly Asn Ala Leu Glu Arg Arg Lys Phe
145 150 155 160
Gly Pro Leu Gly Phe Asn Ile Pro Tyr Glu Phe Thr Asp Gly Asp Leu
165 170 175
Arg Ile Cys Ile Ser Gln Leu Lys Met Phe Leu Asp Glu Tyr Asp Asp
180 185 190
Ile Pro Tyr Lys Val Leu Lys Tyr Thr Ala Gly Glu Ile Asn Tyr Gly
195 200 205
Gly Arg Val Thr Asp Asp Trp Asp Arg Arg Cys Ile Met Asn Ile Leu
210 215 220
Glu Asp Phe Tyr Asn Pro Asp Val Leu Ser Pro Glu His Ser Tyr Ser
225 230 235 240
Ala Ser Gly Ile Tyr His Gln Ile Pro Pro Thr Tyr Asp Leu His Gly
245 250 255
Tyr Leu Ser Tyr Ile Lys Ser Leu Pro Leu Asn Asp Met Pro Glu Ile
260 265 270
Phe Gly Leu His Asp Asn Ala Asn Ile Thr Phe Ala Gln Asn Glu Thr
275 280 285
Phe Ala Leu Leu Gly Thr Ile Ile Gln Leu Gln Pro Lys Ser Ser Ser
290 295 300
Ala Gly Ser Gln Gly Arg Glu Glu Ile Val Glu Asp Val Thr Gln Asn
305 310 315 320
Ile Leu Leu Lys Val Pro Glu Pro Ile Asn Leu Gln Trp Val Met Ala
325 330 335
Lys Tyr Pro Val Leu Tyr Glu Glu Ser Met Asn Thr Val Leu Val Gln
340 345 350
Glu Val Ile Arg Tyr Asn Arg Leu Leu Gln Val Ile Thr Gln Thr Leu
355 360 365
Gln Asp Leu Leu Lys Ala Leu Lys Gly Leu Val Val Met Ser Ser Gln
370 375 380
Leu Glu Leu Met Ala Ala Ser Leu Tyr Asn Asn Thr Val Pro Glu Leu
385 390 395 400
Trp Ser Ala Lys Ala Tyr Pro Ser Leu Lys Pro Leu Ser Ser Trp Val
405 410 415
Met Asp Leu Leu Gln Arg Leu Asp Phe Leu Gln Ala Trp Ile Gln Asp
420 425 430
Gly Ile Pro Ala Val Phe Trp Ile Ser Gly Phe Phe Phe Pro Gln Ala
435 440 445
Phe Leu Thr Gly Thr Leu Gln Asn Phe Ala Arg Lys Phe Val Ile Ser
450 455 460
Ile Asp Thr Ile Ser Phe Asp Phe Lys Val Met Phe Glu Ala Pro Ser
465 470 475 480
Glu Leu Thr Gln Arg Pro Gln Val Gly Cys Tyr Ile His Gly Leu Phe
485 490 495
Leu Glu Gly Ala Arg Trp Asp Pro Glu Ala Phe Gln Leu Ala Glu Ser
500 505 510
Gln Pro Lys Glu Leu Tyr Thr Glu Met Ala Val Ile Trp Leu Leu Pro
515 520 525
Thr Pro Asn Arg Lys Ala Gln Asp Gln Asp Phe Tyr Leu Cys Pro Ile
530 535 540
Tyr Lys Thr Leu Thr Arg Ala Gly Thr Leu Ser Thr Thr Gly His Ser
545 550 555 560
Thr Asn Tyr Val Ile Ala Val Glu Ile Pro Thr His Gln Pro Gln Arg

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His Trp Ile Lys Arg Gly Val Ala Leu Ile Cys Ala Leu Asp Tyr			
580	585	590	

<210> 5671

<211> 818

<212> DNA

<213> Homo sapiens

<400> 5671

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120
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180
tgtgggtatg gggtttatcc tgccgagaag atcagctgta tagatcagat atggcataaa
240
gcctgttttc actgtgaagt ttgcaagatg atgctgtctg ttaataactt tgtgagtcac
300
cagaaaaagc cgtactgtca cgcccataac cctaagaaca acactttcac cagtgtctat
360
cacactccat taaatctaaa tgtgaggaca tttccagagg ccatcagtgg gatccatgac
420
caagaagatg gtgaacagtg taaatcagtt tttcattggg acatgaaatc caaggataag
480
gaaggtgcac ctaacaggca gccactggca aatgagagag cctattggac tggatatggg
540
gaaggggaatg cttggtgccc aggagctctg ccagaccccg aaattgtaag gatggttgag
600
gctcgaaagt ctcttggtga ggaatataca gaagactatg agcaaccag gggcaagggg
660
agctttccag ccatgatcac acctgcttat caaagggcc aaaaagccaa ccagctggcc
720
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780
gatactcctg agctgctacg gagcaaggct tggggcac
818

<210> 5672

<211> 220

<212> PRT

<213> Homo sapiens

<400> 5672

Met	Asn	Val	Gln	Pro	Cys	Ser	Arg	Cys	Gly	Tyr	Gly	Val	Tyr	Pro	Ala
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Glu	Lys	Ile	Ser	Cys	Ile	Asp	Gln	Ile	Trp	His	Lys	Ala	Cys	Phe	His
			20					25					30		
Cys	Glu	Val	Cys	Lys	Met	Met	Leu	Ser	Val	Asn	Asn	Phe	Val	Ser	His
			35				40					45			
Gln	Lys	Lys	Pro	Tyr	Cys	His	Ala	His	Asn	Pro	Lys	Asn	Asn	Thr	Phe
			50			55					60				
Thr	Ser	Val	Tyr	His	Thr	Pro	Leu	Asn	Leu	Asn	Val	Arg	Thr	Phe	Pro
65					70				75					80	

Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys
 85 90 95
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro
 100 105 110
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly
 115 120 125
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val
 130 135 140
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp
 145 150 155 160
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro
 165 170 175
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu
 180 185 190
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala
 195 200 205
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly
 210 215 220

<210> 5673

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5673

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 120
 ccgagacgat aaaagaacag ttgggtgttt ataggatgcc ctcaaagtga gctggctaag
 180
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 240
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 300
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 360
 cagcagcagg gacagccaag tgggaggcag gcatggtgca cacctgggga ggccctggt
 420
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 480
 gcctctgcag ccctggcact gccgcccagc cctccatctc agcgggatgt gcagggtgag
 540
 acaggaatgc agggacgttc tgcccctagg tcagcctctt catcgcctg ttgtgcttcg
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 780
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 1020
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 1080
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 1140
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 1279

<210> 5674

<211> 81

<212> PRT

<213> Homo sapiens

<400> 5674

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Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
			20					25					30		
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
			35				40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55				60					
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
65					70					75				80	
Gln															

<210> 5675

<211> 1074

<212> DNA

<213> Homo sapiens

<400> 5675

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 ccctgagctc ccacccgagg cttaggccca aggggcctct tccaggctga gggcctgctg
 120
 gggctgggac aggggctgag gctgaaagca gcagcctgcc tagtgggtga cgccaggggc
 180
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 1074

<210> 5676

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5676

Glu	Val	Thr	Val	Leu	Cys	Thr	Gly	Leu	Ser	Leu	Ser	Ile	Gly	Met	Thr
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Ala	Thr	Ser	Gln	Gly	Cys	Arg	Ala	Gly	Gly	Arg	Cys	Gly	Trp	Ala	Cys
			20					25					30		
Ala	Cys	Phe	Arg	Arg	Gln	Gln	Asn	Arg	Thr	Gln	Pro	Ala	Val	Thr	Pro
		35					40					45			
His	Ser	Arg	Ser	Arg	Arg	Thr	Ala	Ser	Arg	Met	Ser	Leu	Gly	Glu	Gln
	50					55					60				
Gly	Ser	Thr	Thr	Gly	Leu	Thr	Leu	Gly	His	Arg	Ala	Pro	Ala	Pro	Trp
65					70				75					80	
Gly	Met	Ser	Trp	His	Asn	His	Arg	Arg	Gln	Val	Asn	Arg	Ile	Lys	Ser
			85						90				95		
Arg	Gln	Cys	Leu	Ser	Met	Ser	Glu	Thr	Ala	Val	Ala	Arg	Ala	Trp	Pro
		100					105					110			
Arg	Ala	Ala	Gly	Pro	Ala	Leu	Ala	Ile	Ser	Pro	Gly	Leu	Ala	Arg	Gly
	115					120					125				
Gly	Leu	Gly	Leu	Thr	Pro	Arg	Thr	Arg	Cys	Pro	Gln	Arg	Val	Pro	His
	130					135					140				

Cys
 145

<210> 5677

<211> 477

<212> DNA

<213> Homo sapiens

<400> 5677

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 120
 agggaaagca agatgcagca gtgaggccct ctctggtatc cattcattca cttcactcaa
 180
 cagctgttta tgaccatgag caatacaagc cttgtgaaga tcttgagca gggcacaagc
 240
 cgctgacgtc tgctccagtg agaagccctg ctgccttccc caattcgctt tctttccgca
 300
 gccgccgctg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca
 360
 ccagctggag aagaccacca atgctgagat gagggaggtg ctggctgagc tgctggagct
 420
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 477

<210> 5678

<211> 151

<212> PRT

<213> Homo sapiens

<400> 5678

Met	Ala	Ser	Leu	Arg	Leu	Cys	Ser	Gly	His	Pro	Ser	Ser	Ser	Ser	Ser
1				5					10					15	
Ala	Ser	Thr	Ser	Leu	Ile	Ser	Ala	Leu	Val	Val	Phe	Ser	Ser	Trp	Cys
			20					25					30		
Met	Glu	Trp	Thr	Ser	Arg	Tyr	Phe	His	Met	Gln	Ile	Arg	Gly	Arg	Gly
		35				40					45				
Ser	Gly	Gly	Cys	Gly	Lys	Lys	Ala	Asn	Trp	Gly	Arg	Gln	Gln	Gly	Phe
	50					55					60				
Ser	Leu	Glu	Gln	Thr	Ser	Ala	Ala	Cys	Ala	Leu	Leu	Gln	Asp	Leu	His
65					70				75					80	
Lys	Ala	Cys	Ile	Ala	His	Gly	His	Lys	Gln	Leu	Leu	Ser	Glu	Val	Asn
				85					90					95	
Glu	Trp	Ile	Pro	Glu	Arg	Ala	Ser	Leu	Leu	His	Leu	Ala	Phe	Pro	Thr
			100					105					110		
Ser	Asn	Pro	Leu	Gly	Gln	Arg	Gly	Gly	Val	Leu	Pro	Leu	Leu	His	Gln
		115					120					125			
Cys	Pro	Phe	Leu	Pro	Trp	Ser	Gln	Ala	Ala	Ser	Phe	Gln	His	Arg	Pro
	130					135					140				
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<210> 5679

<211> 665

<212> DNA

<213> Homo sapiens

<400> 5679

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120
tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca
180
ccacagcagc ctagtcctga atccacacca cagcagccta gccctgaatc cacaccacag
240
cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcacccgaa
300
atccgccgct cctcttgctg ccttttatct ccagatgcta acgtgaaggc agcccctcaa
360
tccaggaaag cagaaaatct tcaagaaaac cctccagtca tcgtaacgcg tgcctccaa
420
gccctcggaa ctgtggctgt ggctctgggg gctctaggag ctgcctacta catcactgaa
480
tccttgtaga caagccccta ggcccacagt ctggcagacc tccaccagcc ccaggagttg
540
ataggtgatg gcgctgggag aagatgttca gaatatctca aaagccaagt ccagaagatc
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660
aaaaa
665

<210> 5680
<211> 143
<212> PRT
<213> Homo sapiens

<400> 5680
Val Gly Arg Ile Tyr His Glu Glu Gly Gln Glu Glu Lys Val Arg Gly
1 5 10 15
Gln Thr Pro Pro Asp Ser Thr Ser Gln His Ala Gly Ser Asn Ser Thr
20 25 30
Ser Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln Gln Pro Ser Pro Glu
35 40 45
Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His Ser Ser
50 55 60
Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro Ala Pro
65 70 75 80
Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala Asn Val
85 90 95
Lys Ala Ala Pro Gln Ser Arg Lys Ala Glu Asn Leu Gln Glu Asn Pro
100 105 110
Pro Val Ile Val Thr Arg Val Leu Gln Ala Leu Gly Thr Val Ala Val
115 120 125
Ala Leu Gly Ala Leu Gly Ala Ala Tyr Tyr Ile Thr Glu Ser Leu
130 135 140

<210> 5681
<211> 1402
<212> DNA
<213> Homo sapiens

<400> 5681

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120
tagacattga tggaagcaga aacaaaaact cttcccctgg agaatgcac catcctttca
180
gagggctctc tgcaggaagg acaccgatta tggattggca acctggaccc caaaattacc
240
gaataccacc tcctcaagct cctccagaag tttggcaagg taaagcagtt tgacttctc
300
ttccacaagt caggtgcttt ggagggacag cctcgaggct actgttttgt taactttgaa
360
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420
aagctggtgg tgcgatgggc acatgctcaa gtaaagagat atgatcataa caagaatgat
480
aagattcttc caatcagtct cgagccatcc tcaagcactg agcctactca gtctaacct
540
agtgtcactg caaagataaa agccattgaa gcaaaactga aaatgatggc ggaaaatcct
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gatgcagagt atccagcagc gcctgtttat tcctacttta agccaccaga taaaaaagg
660
actactccat attctagaac agcatggaaa tctcgaagat gatggttgtg aattactgta
720
gcagcaaaag caaattggtc tccacaccta aaatcgtctg cctgtgtact ttgtagatgt
780
gaatggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg
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900
aatagcgttg tatcccaa atgtgatttga accctgggat gctctaattg gctggttgg
960
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1020
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1080
tacgctcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgagag
1140
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1200
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1260
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1380
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1402

<210> 5682

<211> 190

<212> PRT

<213> Homo sapiens

<400> 5682

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Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
 20           25           30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
 35           40           45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
 50           55           60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
 65           70           75           80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
 85           90           95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
 100          105          110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
 115          120          125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
 130          135          140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
 145          150          155          160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
 165          170          175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
 180          185          190

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<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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120
atgcttttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tggttaaaag tagggaaata cagtgttcca gggcatagga atggtgctct
240
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300
acaaatttca ttctggatgc tgatgctg
328

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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

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Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

```

```

      1           5           10           15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20           25           30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35           40           45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50           55           60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65           70           75           80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85           90           95
Ser Leu Gly Gln Arg Met Asp
      100

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<210> 5685
 <211> 604
 <212> DNA
 <213> Homo sapiens

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<400> 5685
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120
gagcggcagg agtggaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggcctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtgga gctgggggct gggctctgcg gggccctgtg gccatgggag
300
gttgcgggtc ttggctccag gcagctttga gagtgagacg gatagctcac cacataggag
360
aaatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatggttc caggtggcct ctctacgaac
480
caacatggca tctctcgagc agaggccatg ggccagtggg tgcgggctgc catccccga
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600
atcc
604

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<210> 5686
 <211> 69
 <212> PRT
 <213> Homo sapiens

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<400> 5686
Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
1           5           10           15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
20           25           30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

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35 40 45
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val
 50 55 60
 Pro Ser Gln Arg Pro
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<210> 5687
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 5687
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 120
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc
 180
 ctgcagccgg tgtgccccca ggggaccaca tgcataca cgggtggaag cttccagtgt
 240
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 300
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 328

<210> 5688
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 5688
 Thr Leu Ser Arg Pro Arg Gly Ala Gly Lys Gly Gly Gly Asp Gly Gly
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 Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro
 20 25 30
 Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp
 35 40 45
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val
 50 55 60
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys
 65 70 75 80
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys
 85 90 95
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met
 100 105

<210> 5689
 <211> 1897
 <212> DNA
 <213> Homo sapiens

<400> 5689
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tgaacaatca gaatcataga agagtgtgag cactggctct ttgtcttcca ggtgggacag
120
tgtgtggtgg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac
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tctcgcccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta
240
ccgctctcag tctccagtaa gaagcatgga tgaagctcct tgtgttaacg gccgctgggg
300
aacactgaga cccagggctc aaaggcagac tctcaggtt cccgggaagg gaggctttcc
360
ccagccagag gagacggctc tctatcctc aatgggtggga gtttgtctcc aggaacggca
420
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct
480
gctgctgaag gatacgacct gaaaatagga ctttcttttg cccccgacg aggatcaacc
540
agatcagaaa gatctgagat taggatccat agatctgaat tgggatctaa acccgcttcc
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agtagtaatc ccatggatgg catggacaat aggacagttg ggggaagtat gagacaccct
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cctgaacaga caaatggtgt gcatacccca cctcacgtgg ccagtgcctt tgcagggggc
720
gtctccccag gtgccttgcg tcggagtctg gaagccatca aagcgatgtc ctccaaaggc
780
ccctcgccct ctgcagcact aagtcctcct cttgggtctt ctccaggctc tctggggagc
840
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1380
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1440
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1680

gcttcaggtg ctgtcggggt aaaagtaact gtttttcccc ttctcttaaa accacagagg
 1740
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 1800
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 1860
 gtttatgcag ccaacatctg aaaaaaaaaa aaaaaaa
 1897

<210> 5690
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 5690
 Thr Ile Arg Ile Ile Glu Glu Cys Glu His Trp Ser Phe Val Phe Gln
 1 5 10 15
 Val Gly Gln Cys Val Val Val Phe Ser Gln Ala Pro Ser Gly Arg Ala
 20 25 30
 Pro Leu Ser Pro Ser Leu Asn Ser Arg Pro Ser Pro Ile Ser Ala Thr
 35 40 45
 Xaa Ser Ser Ser Arg Ser
 50

<210> 5691
 <211> 1227
 <212> DNA
 <213> Homo sapiens

<400> 5691
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 180
 gtggtgaatc ctaacaaggc caccattggt gtggggctgg gctgccatca ttcaaaccag
 240
 ggtttgcaga gcagtctctg atgaagaatg ccataaaaac atcggaggag tcatggattg
 300
 aacagcagat gctagaagac aagaaacggg ccacagactg ggaggccaca aatgaagcca
 360
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 420
 ctgccaggt ccgaggcccc agccagcccc ggaaagccag cgccacatgc agttcggcca
 480
 cagcagcagc ctccagtggc ctggaggagt ggactagccg gtccccgcgg cagcggagtt
 540
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 660
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 720

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 780
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 1227

<210> 5692

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5692

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Ala	Glu	Met	Tyr	Asn	Arg	Pro	Val	Glu	Val	Tyr	Gln	Tyr	Ser	Thr	Glu
			20					25					30		
Pro	Ile	Asn	Thr	Phe	His	Gly	Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile
		35					40					45			
Arg	Val	Ser	Tyr	His	Arg	Asn	Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro
	50					55				60					
Asn	Lys	Ala	Thr	Ile	Gly	Val	Gly	Leu	Gly	Cys	His	His	Ser	Asn	Gln
65				70				75						80	
Gly	Leu	Gln	Ser	Ser	Leu										
				85											

<210> 5693

<211> 389

<212> DNA

<213> Homo sapiens

<400> 5693

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 120
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 180
 ctgggccctc ccgggttggg gagctgacgg cagcttcccc ccacaggtgc ctctgagcct
 240
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atggacatga aggtcagcgg gcatgtaca
389

<210> 5694
<211> 60
<212> PRT
<213> Homo sapiens

<400> 5694
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Met Ser Arg Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Asn Phe
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Glu Glu Phe Leu His Ala Ile Glu Lys Arg Gly Val Gly Ala Met Glu
35 40 45
Ile Val Ala Met Asp Met Lys Val Ser Gly His Val
50 55 60

<210> 5695
<211> 1417
<212> DNA
<213> Homo sapiens

<400> 5695
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360
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840

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 1417

<210> 5696

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

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Glu	Glu	Ala	Gly	Ala	Leu	Arg	Gln	Ala	Leu	Thr	Phe	Ser	Leu	Leu	Glu
		20					25						30		
Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
	35					40					45				
Lys	Ala	Gln	Leu	Val	Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu	Glu
	50				55						60				
Leu	Asp	Arg	Ala	Leu	Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu	Glu
65				70					75					80	
Thr	Val	Gly	Pro	Trp	Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala	Arg
			85					90						95	
Leu	Glu	Arg	Cys	His	Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys	Thr
		100						105					110		
Ile	Leu	Arg	Gly	Phe	Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His	Leu
	115					120						125			
Val	Ala	Leu	Leu	Ala	Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro	Leu
	130					135						140			
Ala	Ala	Ser	Gly	Pro	Thr	Leu	Ala	Gly	Gln	Thr	Leu	Lys	Gly	Pro	Trp
145				150					155					160	
Asn	Asn	Leu	Glu	Arg	Leu	Ala	Glu	Asn	Thr	Gly	Glu	Phe	Gln	Glu	Val
			165					170						175	
Val	Arg	Ala	Phe	Tyr	Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile	Arg
		180						185					190		
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Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val		240
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Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln		255
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Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		270
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Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg		285
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Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser		300
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Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		320
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Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg		335
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<210> 5697

<211> 3362

<212> DNA

<213> Homo sapiens

<400> 5697

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<210> 5698
 <211> 403
 <212> PRT
 <213> Homo sapiens

<400> 5698
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 Cys Asp Leu Asp Ala Ile Trp Gly Ile Val Val Glu Ala Val Ala Gly
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 Trp Gly Val Leu Phe Ala Leu Cys Phe Ser Cys Leu Leu Ser Gln Ala

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Gln Leu Val Gly Leu	Ala Leu Cys Leu Met Leu	Val Gln Val Ile Ile		
165	170	175		
Ala Val Glu Trp Leu	Val Leu Thr Val Leu Arg	Asp Thr Arg Pro Ala		
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Cys Ala Tyr Glu Pro	Met Asp Phe Val Met Ala	Leu Ile Tyr Asp Met		
195	200	205		
Val Leu Leu Val Val	Thr Leu Gly Leu Ala Leu	Phe Thr Leu Cys Gly		
210	215	220		
Lys Phe Lys Arg Trp	Lys Leu Asn Gly Ala Phe	Leu Leu Ile Thr Ala		
225	230	235	240	
Phe Leu Ser Val Leu	Ile Trp Val Ala Trp Met	Thr Met Tyr Leu Phe		
245	250	255		
Gly Asn Val Lys Leu	Gln Gln Gly Asp Ala Trp	Asn Asp Pro Thr Leu		
260	265	270		
Ala Ile Thr Leu Ala	Ala Ser Gly Trp Val Phe	Val Ile Phe His Ala		
275	280	285		
Ile Pro Glu Ile His	Cys Thr Leu Leu Pro Ala	Leu Gln Glu Asn Thr		
290	295	300		
Pro Asn Tyr Phe Asp	Thr Ser Gln Pro Arg Met	Arg Glu Thr Ala Phe		
305	310	315	320	
Glu Glu Asp Val Gln	Leu Pro Arg Ala Tyr Met	Glu Asn Lys Ala Phe		
325	330	335		
Ser Met Asp Glu His	Asn Ala Ala Leu Arg Thr	Ala Gly Phe Pro Asn		
340	345	350		
Gly Ser Leu Gly Lys	Arg Pro Ser Gly Ser Leu	Gly Lys Arg Pro Ser		
355	360	365		
Ala Pro Phe Arg Ser	Asn Val Tyr Gln Pro Thr	Glu Met Ala Val Val		
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<210> 5699

<211> 1565

<212> DNA

<213> Homo sapiens

<400> 5699

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<210> 5700

<211> 197

<212> PRT

<213> Homo sapiens

<400> 5700

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			20					25					30		
Glu	Pro	Gly	Pro	Glu	Pro	Leu	Pro	Trp	Leu	Gly	Lys	Met	Ala	Gln	Leu

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Lys Ser Pro Phe Pro Leu Gln Pro Lys Asn Lys Arg Ser Tyr Ala Gln		
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Asn Val Thr Val Trp Ile Lys Pro Ser Gly Leu Gln Thr Asp Val Gln		
85	90	95
Lys Ile Leu Arg Asn Ala Arg Lys Leu Pro Glu Lys Thr Gln Thr Phe		
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Tyr Lys Glu Leu Asn Arg Leu Arg Lys Ala Ala Leu Ala Phe Gly Phe		
115	120	125
Leu Asp Leu Leu Lys Gly Val Ala Asp Met Leu Glu Arg Glu Cys Thr		
130	135	140
Leu Leu Pro Glu Thr Ala His Pro Asp Ala Ala Phe Gln Leu Thr His		
145	150	155
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<210> 5701

<211> 1885

<212> DNA

<213> Homo sapiens

<400> 5701

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<210> 5702

<211> 348

<212> PRT

<213> Homo sapiens

<400> 5702

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			20					25					30		
Leu	Leu	Tyr	Glu	Asp	Ile	Gly	Thr	Ser	Arg	Val	Arg	Tyr	Trp	Asp	Leu
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Leu	Leu	Leu	Ile	Pro	Asn	Val	Leu	Phe	Leu	Ile	Phe	Leu	Leu	Trp	Lys
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Ala Asp Lys Ile Leu Trp Glu Ile Thr Arg Phe Phe Leu Leu Ala Ile
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Glu Leu Ser Val Ile Ile Leu Gly Leu Ala Phe Gly His Leu Glu Ser
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Lys Ser Ser Ile Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Leu
145          150          155          160
Ala Tyr Ser Val Thr Gln Gly Thr Leu Glu Ile Leu Tyr Pro Asp Ala
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His Leu Ser Ala Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln
          180          185          190
Phe Trp Leu Val Ser Ser Cys Phe Phe Phe Leu Val Tyr Ser Leu Val
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Val Ile Leu Pro Lys Thr Pro Leu Lys Glu Arg Ile Ser Leu Pro Ser
          210          215          220
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          245          250          255
Leu Cys Cys Val Asp Ala Thr Thr Phe Leu Tyr Phe Ser Phe Phe Ala
          260          265          270
Pro Leu Ile Tyr Val Ala Phe Leu Arg Gly Phe Phe Gly Ser Glu Pro
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Lys Ile Leu Phe Xaa Leu Gln Met Pro Ser Gly Arg Asp Arg Gly Ala
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<210> 5703

<211> 1496

<212> DNA

<213> Homo sapiens

<400> 5703

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<210> 5704

<211> 269

<212> PRT

<213> Homo sapiens

<400> 5704

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<210> 5710

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5710

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His	Phe	Pro	Glu	Ile	Arg	Pro	Gly	Ser	Phe	His	Gly	Leu	Ser	Ser	Leu
			20					25				30			
Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	Leu	Ile	Glu	Arg	Asn
		35				40					45				
Ala	Phe	Asp	Gly	Leu	Ala	Ser	Leu	Val	Glu	Leu	Asn	Leu	Ala	His	Asn

50	55	60
Asn Leu Ser Ser Leu	Pro His Asp Leu Phe Thr	Pro Leu Arg Tyr Leu
65	70	75
Val Glu Leu His Leu	His His Asn Pro Trp Asn Cys Asp Cys Asp Ile	80
	85	90
Leu Trp Leu Ala Trp Trp	Leu Arg Glu Tyr Ile Pro Thr Asn Ser Thr	95
	100	105
Cys Cys Gly Arg Cys His Ala	Pro Met His Met Arg Gly Arg Tyr Leu	110
	115	120
Val Glu Val Asp Gln Ala Ser	Phe Gln Cys Ser Ala Pro Phe Ile Met	125
	130	135
Asp Ala Pro Arg Asp Leu	Asn Ile Ser Glu Gly Arg Met Ala Glu Leu	140
	145	150
Lys Cys Arg Thr Pro Pro	Met Ser Ser Val Lys Trp Leu Leu Pro Asn	155
	165	170
Gly Thr Val Leu Ser His	Ala Ser Arg His Pro Arg Ile Ser Val Leu	175
	180	185
Asn Asp Gly Thr Leu Asn	Phe Ser His Val Leu Leu Ser Asp Thr Gly	190
	195	200
Val Tyr Thr Cys Met Val	Thr Asn Val Ala Gly Asn Ser Asn Ala Ser	205
	210	215
Ala Tyr Leu Asn Val Ser	Thr Ala Glu Leu Asn Thr Ser Asn Tyr Ser	220
	225	230
Phe Phe Thr Thr Val Thr	Val Glu Thr Thr Glu Ile Ser Pro Glu Asp	235
	245	250
Thr Thr Arg Lys Tyr Lys	Pro Val Pro Thr Thr Ser Thr Gly Tyr Gln	255
	260	265
Pro Ala Tyr Thr Thr Ser	Thr Thr Val Leu Ile Gln Thr Thr Arg Val	270
	275	280
Pro Lys Gln Val Ala Val	Pro Ala Thr Asp Thr Thr Asp Lys Met Gln	285
	290	295
Thr Ser Leu Asp Glu Val	Met Lys Thr Thr Lys Ile Ile Ile Gly Cys	300
	305	310
Phe Val Ala Val Thr Leu	Leu Ala Ala Ala Met Leu Ile Val Phe Tyr	315
	325	330
Lys Leu Arg Lys Arg His	Gln Gln Arg Ser Thr Val Thr Ala Ala Arg	335
	340	345
Thr Val Glu Ile Ile Gln	Val Asp Glu Asp Ile Pro Ala Ala Thr Ser	350
	355	360
Ala Ala Ala Thr Ala Ala	Pro Ser Gly Val Ser Gly Glu Gly Ala Val	365
	370	375
Val Leu Pro Thr Ile His	Asp His Ile Asn Tyr Asn Thr Tyr Lys Pro	380
	385	390
Ala His Gly Ala His Trp	Thr Glu Asn Ser Leu Gly Asn Ser Leu His	395
	405	410
Pro Thr Val Thr Thr Ile	Ser Glu Pro Tyr Ile Ile Gln Thr His Thr	415
	420	425
Lys Asp Lys Val Gln Glu	Thr Gln Ile	430
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<210> 5711

<211> 1142

<212> DNA

<213> Homo sapiens

<400> 5711

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 120
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 180
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 300
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<210> 5712

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5712

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Arg	Ile	Leu	Phe	His	Gly	Val	Phe	Tyr	Ala	Gly	Gly	Phe	Ala	Ile	Val
		20						25					30		
Tyr	Tyr	Leu	Ile	Gln	Lys	Phe	His	Ser	Arg	Ala	Leu	Tyr	Tyr	Lys	Leu
		35					40						45		

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
 50 55 60
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys
 85 90 95
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln
 100 105 110
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln
 115 120 125
 Ile Pro Val Phe Lys Leu Ser Gly Glu Asn Gly Asp Glu Val Lys Lys
 130 135 140
 Glu
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<210> 5713
 <211> 1996
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 300
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 420
 aagtttataaa tggagctgga agctgataat gctggaatta cagaaatatt agagaggcga
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 720
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<210> 5714

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5714

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			20					25					30		
Val	Ser	Glu	Phe	Phe	Met	Asn	Ala	Lys	Lys	Asn	Lys	Pro	Glu	Trp	Arg
		35					40					45			
Glu	Glu	Gln	Met	Ala	Ser	Ile	Lys	Lys	Asp	Tyr	Tyr	Lys	Ala	Leu	Glu
	50					55					60				
Asp	Ala	Asp	Glu	Lys	Val	Gln	Leu	Ala	Asn	Gln	Ile	Tyr	Asp	Leu	Val
65					70				75					80	
Asp	Arg	His	Leu	Arg	Lys	Leu	Asp	Gln	Glu	Leu	Ala	Lys	Phe	Lys	Met

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180
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480
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<210> 5716

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5716

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 Glu Cys Leu His Thr Phe Cys Lys Ser Cys Ile Val Lys Tyr Leu Gln
 35 40 45
 Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln
 50 55 60
 Pro Leu Leu Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr
 65 70 75 80
 Lys Leu Val Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg Ile Arg Glu
 85 90 95
 Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu
 100 105 110
 Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His
 115 120 125
 Ser Lys Ala His Tyr Tyr Arg Tyr Asp Glu Gln Leu Asn Leu Cys Leu
 130 135 140
 Glu Arg Leu Arg
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<210> 5717

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 5717

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 300
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 360
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<210> 5718

<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

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Leu	Leu	Met	Leu	Gly	Val	Thr	Leu	Pro	Asn	Ser	Tyr	Trp	Arg	Val	Ser
			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35				40					45				
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
	50					55					60				
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70					75					80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
				85				90						95	
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105					110		
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
		115					120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
	130					135					140				
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145				150					155					160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
				165					170					175	
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
			180					185					190		
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
		195					200						205		
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
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225

<210> 5719
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<212> DNA
<213> Homo sapiens

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 tggggctctg gctgctggag catctgctgg ctggtggggg gggccgagtt ccccttcacc
 2160
 gccccaggg agggtttccc acctcagagt acaccgaggg gacctgcaga gggggctgtc
 2220
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 2267

<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

Val	Pro	Val	Leu	His	Lys	His	Pro	Cys	His	Leu	Val	Thr	Ser	Pro	Pro
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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
		35					40				45				
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50				55					60					
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65					70				75					80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90					95		
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
		100					105					110			
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
	115						120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

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      130      135      140
Phe His Tyr Ala Val Asp Asn Leu Gly Ala Asp Ala Ile Ala Thr Gly
145      150      155      160
His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys
      165      170      175
His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg
      180      185      190
Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr
      195      200      205
Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe
      210      215      220
Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu
225      230      235      240
Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys
      245      250      255
Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln
      260      265      270
Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly
      275      280      285
Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile
      290      295      300
Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys
305      310      315      320
Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg
      325      330      335
Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro
      340      345      350
Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg
      355      360      365
His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly
      370      375      380
Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly
385      390      395      400
Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys
      405      410      415
Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg
      420      425      430
Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly
      435      440      445
Pro Gly Leu Ser Pro Leu Leu
      450      455

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<210> 5721

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5721

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cttatgttag ctatgggata tcatgagaag ggcagagctt tcctgaaaag aaaagaatat
120

ggaatagcct tgccatgtct gttggacgct gacaaatatt tctggtgggc gcttttgtac
180

ttggtgaaca ccagctttaa ggaagatggc ccagactata cagaacacct gccatgccct
 240
 tgagactgca gactttcatc tacaacagtg gttaatgtaa aagagtagtt atgggtgtaaa
 300
 ctggtgaatt tcttcttccc tttgtatttc taattgacct ttcctcctg taaagaaaag
 360
 aattttcaag caggtaggat atgctctctt tttctgtaca
 400

<210> 5722
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 5722
 Leu Asp Ile Ala Asn Gln Thr Gly Arg Ser Ile Arg Ile Pro Pro Ser
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 Glu Arg Lys Ala Leu Met Leu Ala Met Gly Tyr His Glu Lys Gly Arg
 20 25 30
 Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu Pro Cys Leu Leu
 35 40 45
 Asp Ala Asp Lys Tyr Phe Trp Trp Ala Leu Leu Tyr Leu Val Asn Thr
 50 55 60
 Ser Phe Lys Glu Asp Gly Pro Asp Tyr Thr Glu His Leu Pro Cys Pro
 65 70 75 80

<210> 5723
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 5723
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 aagaatgtgg agagttttct agaagcctgt cgaaaaatgg gggatgcctga ggtatggggg
 120
 ctgctttcta aagagtgggtg gcatgccgga ctcagcggag ccatgtggca tggatgggtg
 180
 gcttccatct gcagcggatg tctgctctca gatgaaggca caggctgccc ctgcctgccc
 240
 cagcatgccc cctgccctgc atgccccctg ccctgcatgt cacctgtcct acacatcccc
 300
 tgccctgcag gcccctctt gtctgcatg tcacctgtcc tgcacatgcc ctgccctgca
 360
 ctcctcctgc acgcgt
 376

<210> 5724
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 5724
 Xaa Thr Thr Phe Ser Ser Phe His Pro Pro Gln Pro Lys Leu Ser Ala

1	5	10	15
Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu Glu Ala Cys Arg Lys			
	20	25	30
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
	35	40	45
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
	50	55	60
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
	85	90	95
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
	100	105	110
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala			
	115	120	125

<210> 5725
 <211> 1160
 <212> DNA
 <213> Homo sapiens

<400> 5725
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 120
 accgcgcacg ggcgagcatg gggggcaagc agagcacggc gacccgctcc cggggggccc
 180
 ttcccggggg tctccaccga tgacagcgcc gtgccgccc cgggaggggc gccccatttc
 240
 gggcactacc ggacgggagg cggggccatg gggctgcgca gcgcatcggt cagctcgggtg
 300
 gcaggcatgg gcatggaccc cagcacggcc ggggggggtgc cctttggcct ctacaccccc
 360
 gcctcccggg gcaccggcga ctccgagagg gcgcccggcg gcggagggtc tgcgtccgac
 420
 tccacctatg cccatggcaa tggttaccag gagacgggcg gcggtcacca tagagacggg
 480
 atgctgtacc tgggctcccg agcctcgctg gcggatgctc tacctctgca catcgcaccc
 540
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 660
 gatgtgctga ctaaagacgc gggtagtgt gtgatctgcc tggaggagct gctgcagggg
 720
 gacacgatag ccaggctgcc ctgcctgtgc atctatcaca aaagctgcat agactcgtgg
 780
 tttgaagtga acagatcttg tccggaacac cctgcggact gacctgcggg cttgcttgct
 840
 gactcctctc aaaggacag agcgcccctg ctccaggag gaggtcacc ggaccctggg
 900
 gcagagctga gcttgggaca ccagcgggaa cagggcaccc cttctgcact gacttccaga
 960

tcattggttct cccttcctcc ctgaggacac caaattggat gagagcaagt ttgagagaag
1020
aatgaatcaa ctgctatcct tcccctcacc cctcagccca ggaggggaaag ggcattttct
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1140
aaaaaaagtc tagtgtcgac
1160

<210> 5726
<211> 273
<212> PRT
<213> Homo sapiens

<400> 5726
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Leu Tyr Ala Arg Pro Ala Leu Pro Leu Leu Leu Arg Ser Gly Gly Gly
20 25 30
Ser Arg Pro Pro Gly Ser Arg Pro Thr Ala His Gly Arg Ala Trp Gly
35 40 45
Ala Ser Arg Ala Arg Arg Pro Ala Pro Gly Gly Pro Phe Pro Gly Val
50 55 60
Ser Thr Asp Asp Ser Ala Val Pro Pro Pro Gly Gly Ala Pro His Phe
65 70 75 80
Gly His Tyr Arg Thr Gly Gly Gly Ala Met Gly Leu Arg Ser Ala Ser
85 90 95
Val Ser Ser Val Ala Gly Met Gly Met Asp Pro Ser Thr Ala Gly Gly
100 105 110
Val Pro Phe Gly Leu Tyr Thr Pro Ala Ser Arg Gly Thr Gly Asp Ser
115 120 125
Glu Arg Ala Pro Gly Gly Gly Gly Ser Ala Ser Asp Ser Thr Tyr Ala
130 135 140
His Gly Asn Gly Tyr Gln Glu Thr Gly Gly Gly His His Arg Asp Gly
145 150 155 160
Met Leu Tyr Leu Gly Ser Arg Ala Ser Leu Ala Asp Ala Leu Pro Leu
165 170 175
His Ile Ala Pro Arg Trp Phe Ser Ser His Ser Gly Phe Lys Cys Pro
180 185 190
Ile Cys Ser Lys Ser Val Ala Ser Asp Glu Met Glu Met His Phe Ile
195 200 205
Met Cys Leu Ser Lys Pro Arg Leu Ser Tyr Asn Asp Asp Val Leu Thr
210 215 220
Lys Asp Ala Gly Glu Cys Val Ile Cys Leu Glu Glu Leu Leu Gln Gly
225 230 235 240
Asp Thr Ile Ala Arg Leu Pro Cys Leu Cys Ile Tyr His Lys Ser Cys
245 250 255
Ile Asp Ser Trp Phe Glu Val Asn Arg Ser Cys Pro Glu His Pro Ala
260 265 270
Asp

<210> 5727
<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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120
gagatcctaa ggaccttgag ccccgaggag ctagagcagc tggactgcga actacaggag
180
atggatcctg agaacatgct cctgccagct ggactaagac aacgtgacca gacaaagaag
240
agcccaacgg ggccactgga ccgagaggcc cttttgcagt acttgaggca acaggcacta
300
gaagtcaaag agcgtgatga cttggtgccc ttcacaggcg agaagaaggg gaaaccctat
360
attcagccca agagggaaat cccagcagag gagcagatca ccctggagcc tgagctggag
420
gaggcactgg cacatgccac agatgctgaa atgtgtgaca ttgcagcaat tctggacatg
480
tacacactga tgagtaacaa gcaatactat gatgccctct gcagtggaga aatctgcaac
540
actgaaggca ttagcagtgt ggtacagcct gacaagtata agccagtgcc ggatgaaccc
600
ccaaatccca caaacattga ggagatacta aagaggggtcc gaagcaatga caaggagctg
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gaggaggtga acttgaataa tatacaggac atcccaatac ccatgctaag tgagctgtgt
720
gaggcaatga aggcaaatac ctatgtgcgg agcttcagtc tggtagccac gaggagtggg
780
gacccattg ccaatgcagt ggctgacatg ttgcgtgaga atcgtagcct ccagagccta
840
aacatcgaat ccaacttcat tagcagcaca ggactcatgg ctgtgctgaa ggcagttcgg
900
gaaaatgcca cactcactga gctccgtgta gacaatcagc gccagtggcc tggatgatgca
960
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1020
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1080
ctacgtcgcc agcaaaagaa gagataacac tgcatttccc ttaccaact agcgctggga
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1200
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa
1237

<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

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			20					25					30				
Lys	Tyr	Arg	Asp	Ile	Asp	Glu	Asp	Glu	Ile	Leu	Arg	Thr	Leu	Ser	Pro		
		35					40					45					
Glu	Glu	Leu	Glu	Gln	Leu	Asp	Cys	Glu	Leu	Gln	Glu	Met	Asp	Pro	Glu		
	50					55					60						
Asn	Met	Leu	Leu	Pro	Ala	Gly	Leu	Arg	Gln	Arg	Asp	Gln	Thr	Lys	Lys		
65				70					75						80		
Ser	Pro	Thr	Gly	Pro	Leu	Asp	Arg	Glu	Ala	Leu	Leu	Gln	Tyr	Leu	Glu		
			85					90				95					
Gln	Gln	Ala	Leu	Glu	Val	Lys	Glu	Arg	Asp	Asp	Leu	Val	Pro	Phe	Thr		
		100						105				110					
Gly	Glu	Lys	Lys	Gly	Lys	Pro	Tyr	Ile	Gln	Pro	Lys	Arg	Glu	Ile	Pro		
	115					120					125						
Ala	Glu	Glu	Gln	Ile	Thr	Leu	Glu	Pro	Glu	Leu	Glu	Glu	Ala	Leu	Ala		
	130					135					140						
His	Ala	Thr	Asp	Ala	Glu	Met	Cys	Asp	Ile	Ala	Ala	Ile	Leu	Asp	Met		
145				150					155						160		
Tyr	Thr	Leu	Met	Ser	Asn	Lys	Gln	Tyr	Tyr	Asp	Ala	Leu	Cys	Ser	Gly		
			165					170						175			
Glu	Ile	Cys	Asn	Thr	Glu	Gly	Ile	Ser	Ser	Val	Val	Gln	Pro	Asp	Lys		
		180						185				190					
Tyr	Lys	Pro	Val	Pro	Asp	Glu	Pro	Pro	Asn	Pro	Thr	Asn	Ile	Glu	Glu		
	195					200						205					
Ile	Leu	Lys	Arg	Val	Arg	Ser	Asn	Asp	Lys	Glu	Leu	Glu	Glu	Val	Asn		
	210					215					220						
Leu	Asn	Asn	Ile	Gln	Asp	Ile	Pro	Ile	Pro	Met	Leu	Ser	Glu	Leu	Cys		
225				230						235					240		
Glu	Ala	Met	Lys	Ala	Asn	Thr	Tyr	Val	Arg	Ser	Phe	Ser	Leu	Val	Ala		
			245					250						255			
Thr	Arg	Ser	Gly	Asp	Pro	Ile	Ala	Asn	Ala	Val	Ala	Asp	Met	Leu	Arg		
		260						265				270					
Glu	Asn	Arg	Ser	Leu	Gln	Ser	Leu	Asn	Ile	Glu	Ser	Asn	Phe	Ile	Ser		
	275					280						285					
Ser	Thr	Gly	Leu	Met	Ala	Val	Leu	Lys	Ala	Val	Arg	Glu	Asn	Ala	Thr		
	290				295						300						
Leu	Thr	Glu	Leu	Arg	Val	Asp	Asn	Gln	Arg	Gln	Trp	Pro	Gly	Asp	Ala		
305				310						315					320		
Val	Glu	Met	Glu	Met	Ala	Thr	Val	Leu	Glu	Gln	Cys	Pro	Ser	Ile	Val		
			325					330						335			
Arg	Phe	Gly	Tyr	His	Phe	Thr	Gln	Gln	Gly	Pro	Arg	Ala	Arg	Ala	Ala		
		340						345				350					
Gln	Ala	Met	Thr	Arg	Asn	Asn	Glu	Leu	Arg	Arg	Gln	Gln	Lys	Lys	Arg		
	355					360						365					

<210> 5729

<211> 381

<212> DNA

<213> Homo sapiens

<400> 5729

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 120
 cagccagatg cgcctcaggt ctttctcgaa cttgatctgc aagacgcaga gagagggacc
 180
 gccaaagtaat tcgtggcaaa gaaacgtgtt ctcagcactt tgccctccca gggccaagca
 240
 gggggccact cacctgcttg cgtctcagge gtccctcctg gaccttcctc cgcaggaacc
 300
 gcgtcttctt caccagcttc cggacttgt ggtggttcat cttccgccgg cggatcttca
 360
 gcacgttttt gcactaaatt t
 381

<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

Phe	Val	Ala	Lys	Lys	Arg	Val	Leu	Ser	Thr	Leu	Pro	Ser	Gln	Gly	Gln
1				5					10					15	
Ala	Gly	Gly	His	Ser	Pro	Ala	Cys	Val	Ser	Gly	Val	Pro	Pro	Gly	Pro
			20					25					30		
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
		35					40					45			
Gly	Ser	Ser	Ser	Ala	Gly	Gly	Ser	Ser	Ala	Arg	Phe	Cys	Thr	Lys	Phe
	50					55					60				

<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 120
 attttgtcag cacttgggaa cttcctggcc cagatgattg agaagaagcg gaaaaaagaa
 180
 aactctagaa gtctggatgt cgggtgggcct ctgagatatg ccgtttacgg gttcttcttc
 240
 acagggccgc tgagtcactt cttctacttc ttcattggaac attggatccc tcttgaggtc
 300
 cccctggcag ggctcaggag gcttctcctg gaccgcctcg tctttgcacc ggccttcctc
 360
 atgttggttct tctcatcat gaactttctg gaggggaaag acgcctcagc cttcgccgcc
 420
 aagatgaggg ggggcttctg gccggcgctg aggatgaact ggcgggtgtg gacgccacta
 480
 cagttcatca acatcaacta cgccctctg aagttccggg tgctcttcgc caacctggca
 540
 gctctgttct ggtatgccta cctggcctcc ttggggaagt gacgaccgct gggagaacat
 600

caggtgcact gtggacgtgg gtctgggggt ctcacccgcc cagcgagagc agaaccaatc
 660
 cagtcaggat gtcactgact ctaaatacagg tgattcaaga tgcccaaaaa tgatggatag
 720
 agaaacagaa atctctgaat gtcagaaccc tgtcttttaa aaaggcagtc actgccttca
 780
 ggtggtgctg ccccagaaac ttaaaattta gtcgaggcag tttcaattgt tactgtggac
 840
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 891

<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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Arg	Arg	Ala	Leu	Ala	Gln	Tyr	Leu	Leu	Phe	Leu	Arg	Leu	Tyr	Pro	Val
		20						25					30		
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
		35					40					45			
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
	50					55					60				
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65					70					75					80
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
				85					90					95	
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
			100					105						110	
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
		115					120					125			
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
	130					135						140			
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145					150					155					160
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165					170						175	
Ala	Asn	Leu	Ala	Ala	Leu	Phe	Trp	Tyr	Ala	Tyr	Leu	Ala	Ser	Leu	Gly
			180					185					190		

Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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 120

gtcagctata ctttcctctt ctggctgccc ctgtacatca cgaatgtgga tcaccttgat
180
gccaaaaagg cggggtgcac aggtagcccc gaccctctca ggcattccag ccacagaaca
240
tcaaagtgag cgagtactgc gctggctgtg gcttcagaga acctgtatgt gccacgtgga
300
aaaacaggac accagagccc accagacagt gccggccagc agagaagcag agagccagcg
360
ccacacaaca tcaagaaggc cgacaaccag gttggaaacc aagacggagc tcagaccac
420
cacatcggcc cagaggcttt tccagcacc atgatgttcc ggactgacct aaaaactaat
480
tgtcgagaag ccaaggggtga ggaggcagga agcacctccg gttggaggca cccaggcttg
540
ccagccacag agcgccccga agtcaccgtc atcccagccc ctggccttcc tgccgcctc
600
cggggccatg gcgctgctgt tcagctcagg cacaggggca cagcagaggt ttgggaagcg
660
gtctccccac cggcactggg attggcgggt ccaagcccag caaccggctt cgctccacaa
720
cacacaccac acctgggact gtttttaata catagcaaca gactgggtta tttatttaag
780
atgtgtattg tgtcatatga agtttaagag acataaatgg cattttgtta tttattaaga
840
caaactccaa ttgttctctg gctgtttttt tcagttgtgt ctagcaaaat acttatctgc
900
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950

<210> 5734

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5734

Xaa	His	Val	Val	Ile	Leu	Pro	Gly	Asp	Gly	Gly	Ser	Gly	Thr	Ala	Ala
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Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
			20					25					30		
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
		35					40					45			
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
	50					55					60				
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<210> 5735

<211> 4241

<212> DNA

<213> Homo sapiens

<400> 5735

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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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			20				25						30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
		35					40					45			
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
	50					55					60				
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
65					70					75				80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
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<210> 5738
<211> 99
<212> PRT
<213> Homo sapiens
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<400> 5738

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      20           25           30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
      35           40           45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
      50           55           60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
65           70           75           80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
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<210> 5739

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5739

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<210> 5740

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5740

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          20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
          35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
          50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
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Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
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Phe Leu Gly Arg Ala Gln Pro Gln
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<210> 5741

<211> 2444

<212> DNA

<213> Homo sapiens

<400> 5741

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780
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900

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<211> 427

<212> PRT

<213> Homo sapiens

<400> 5742

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 Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala Arg
 35 40 45
 Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe
 50 55 60
 Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys
 65 70 75 80
 Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
 85 90 95
 Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
 100 105 110
 Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
 115 120 125
 Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
 130 135 140
 Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr
 145 150 155 160
 Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
 165 170 175
 Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
 180 185 190
 Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu
 195 200 205
 Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
 210 215 220
 Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
 225 230 235 240
 Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu
 245 250 255
 Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys
 260 265 270
 Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala
 275 280 285
 Thr Cys Ser Ser Ala Thr Ala Ala Ser Ser Gly Leu Glu Glu Trp
 290 295 300
 Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
 305 310 315 320
 Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
 325 330 335
 Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
 340 345 350
 Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
 355 360 365
 Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
 370 375 380
 Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

385 390 395 400
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 Lys Val His Arg Asp Pro Pro Pro Asp Lys Ser
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 <211> 550
 <212> DNA
 <213> Homo sapiens

<400> 5743
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<210> 5744
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 5744
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 Cys Lys Gly Ala Arg Arg Pro Gly Cys Pro Thr Pro Glu Thr Gly Gln
 35 40 45
 Gly Gly Arg Pro Pro Lys Gly Pro Arg Thr Gly Arg Pro Ala Pro Ser
 50 55 60
 Pro Gly Ser Pro Pro Arg Glu Ser Arg Cys Leu Ala Pro Xaa Asp Pro
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 Leu Gly Trp Thr Pro Gly Pro Pro Ala Ala Ala Pro Gly Ala Leu
 85 90 95

<210> 5745
 <211> 849

<212> DNA

<213> Homo sapiens

<400> 5745

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120
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420
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<210> 5746

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5746

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			20					25					30		
Val	Thr	Gln	Lys	Leu	Met	Leu	Arg	Lys	Ala	Ser	Leu	Gly	Pro	Leu	Pro
		35					40					45			
Arg	Ala	Ser	Glu	Arg	Pro	Gly	Val	Pro	Val	Phe	Leu	Glu	Met	Gly	Pro
	50					55					60				
Ser	Ala	Ala	Gly	Cys	Glu	Ala	Leu	Arg	Ser	Ile	Thr	Gly	Arg	Ala	Trp
65				70					75					80	
Arg	Trp	Trp	Pro	Pro	Gly	Thr	Thr	Leu	Ser	Cys	Leu	Phe	Thr	Phe	His
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Tyr	Gln	Val	Phe	Ser	Gly	His	Tyr	Asp	Leu	Phe	Pro	Tyr	Asn	Ser	Asp

<400> 5747
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<211> 492

<212> PRT

<213> Homo sapiens

<400> 5748

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<213> Homo sapiens

<400> 5751

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<211> 221

<212> PRT

<213> Homo sapiens

<400> 5754

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Ile Glu Asn	Phe Pro Leu Ser Glu	Leu Met Thr Glu Ile	Ser Thr Gly
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Glu Lys Glu	Val Pro Val Ile Phe	Ile His Pro Leu Asn	Thr Gly Leu
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<212> DNA

<213> Homo sapiens

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<211> 415

<212> PRT

<213> Homo sapiens

<400> 5756

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Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu
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His Trp Ile Cys Gln Pro Tyr Ile Arg Pro Gly Pro Arg Glu Gly Ser
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<210> 5757

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 5757

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<212> PRT

<213> Homo sapiens

<400> 5758

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<212> DNA

<213> Homo sapiens

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<210> 5767

<211> 1910

<212> DNA

<213> Homo sapiens

<400> 5767

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<211> 360

<212> PRT

<213> Homo sapiens

<400> 5768

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Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn		175
	180	185
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln		190
	195	200
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn		205
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Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu		220
225	230	235
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	245	250
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Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser		270
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305	310	315
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu		320
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Glu Gly Ala Glu Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn		335
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 <211> 427
 <212> DNA
 <213> Homo sapiens

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<400> 5770
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<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

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<211> 579

<212> DNA

<213> Homo sapiens

<400> 5773

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<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
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<212> DNA

<213> Homo sapiens

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<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

Met	Gly	Ile	Asn	Met	Pro	Lys	Val	Leu	Ser	Gln	Pro	Ser	Asp	Leu	Asp
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Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
			20					25						30	
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
		35					40					45			
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
		50				55					60				
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65				70					75					80	
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
			85						90					95	
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

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 Pro Glu Gly Ala Pro Glu Arg Ala Ala Glu Leu Gly Val Asn Phe Gly
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 130 135 140
 Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Leu Lys His Gln
 145 150 155 160
 Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys
 165 170 175
 Cys Phe Ala Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser
 180 185 190
 Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg
 195 200 205
 Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro
 210 215 220
 Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu
 225 230 235 240
 Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser
 245 250 255
 Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn
 260 265 270
 Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys
 275 280 285
 Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg
 290 295 300
 Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg
 305 310 315 320
 Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys
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 Thr Pro Pro Pro Ala Pro Thr
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<210> 5777

<211> 1431

<212> DNA

<213> Homo sapiens

<400> 5777

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 120
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 240
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 300
 gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgctgcccgt
 360
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 420

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600
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720
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<210> 5778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 5778

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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
			20					25					30		
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
			35					40					45		
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
			50				55				60				
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65					70					75				80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85					90						95	
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

			100					105					110				
Gln	Arg	Arg	Ala	Gly	Pro	Pro	Thr	Tyr	Val	Pro	Gly	Cys	Leu	Arg	Gln		
		115					120					125					
Ala	Ala	Arg	Ser	Pro	Lys	Leu	Val	Arg	Ala	Thr	Trp	Val	Thr	Ala	Ala		
	130					135					140						
Val	Pro	Gly	Arg	Lys	Arg	Ser	Leu	Ala	Pro	Glu	Gln	Pro	Ile	Leu	Gly		
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Pro	Ser	Gln	Val														

<210> 5779
 <211> 371
 <212> DNA
 <213> Homo sapiens

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<210> 5780
 <211> 123
 <212> PRT
 <213> Homo sapiens

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Gln	Arg	His	Gly	Arg	Glu	Arg	Gly	Val	Ile	Ser	Ala	Leu	Ser	Gly	Ile		
		20					25						30				
Pro	Cys	Val	Cys	Xaa	Arg	Val	Cys	Ala	His	Gly	Asn	Val	Cys	Gly	Cys		
	35						40				45						
Val	Cys	Val	His	Ala	Ala	Val	Cys	Gly	Cys	Ala	Xaa	Val	Cys	Gly	Cys		
	50					55					60						
Val	Gly	Val	Cys	Gly	Cys	Val	His	Gln	Cys	Arg	Cys	Ala	Trp	Val	Cys		
65				70				75						80			
Thr	Gly	Gly	Cys	Val	Tyr	Val	Cys	Gly	Gly	Val	Pro	Ile	Cys	Ala	Gly		
			85				90						95				
Val	Trp	Val	Cys	Arg	Val	Xaa	Cys	Leu	Cys	Val	Gly	Val	Xaa	Pro	Cys		
		100					105						110				
Val	Pro	Leu	Trp	Arg	Cys	Val	Gly	Val	Cys	Ser							
	115						120										

<210> 5781
<211> 845
<212> DNA
<213> Homo sapiens

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420
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720
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845

<210> 5782
<211> 147
<212> PRT
<213> Homo sapiens

<400> 5782
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Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
35 40 45
Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro
50 55 60
Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
65 70 75 80
Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

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120					
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240					
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1080					
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1140					

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<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

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			20					25					30		
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile
		35					40					45			
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
	50					55					60				
Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
65					70					75				80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
			85					90					95		
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
		100						105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
	115						120				125				
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
	130					135					140				
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145				150				155						160	
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
			165					170					175		
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

180 185 190
 Glu Leu Ser Lys Ser Ile Ala Asn Lys Ile Lys Asp Lys Gln Gly Asp
 195 200 205
 Ile Thr Glu Asp Glu Thr Ile Arg Phe Lys Ser Tyr Leu Leu Ser Met
 210 215 220
 Gly Ile Ala Asn Pro Val Thr Arg Glu Thr Tyr Gly Ser Gly Thr Gln
 225 230 235 240
 Tyr His Met Gln Leu Ala Lys Gln Leu Ala Gly Ile Leu Gln Val Pro
 245 250 255
 Leu Glu Glu Arg Gly Gly Ile Met Ser Leu Thr Glu Val Tyr Cys Leu
 260 265 270
 Val Asn Arg Ala Arg Gly Met Glu Leu Leu Ser Pro Glu Asp Leu Val
 275 280 285
 Asn Ala Cys Lys Met Leu Glu Ala Leu Lys Leu Pro Leu Arg Leu Arg
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 Val Phe Asp Ser Gly Val Met Val Ile Glu Leu Gln Ser His Lys Glu
 305 310 315 320
 Glu Glu Met Val Ala Ser Ala Leu Glu Thr Val Ser Glu Lys Gly Ser
 325 330 335
 Leu Thr Ser Glu Glu Phe Ala Lys Leu Val Gly Met Ser Val Leu Leu
 340 345 350
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<210> 5785

<211> 785

<212> DNA

<213> Homo sapiens

<400> 5785

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785

<210> 5786
<211> 159
<212> PRT
<213> Homo sapiens

<400> 5786
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35 40 45
Leu Ala Gln Pro Leu Gly Pro Trp Pro Leu Ser Ser Ala Gly Pro Arg
50 55 60
Leu Val Phe Asn Arg Val Asn Arg Arg Arg Asp Pro Ser Lys Ser Pro
65 70 75 80
Ser Leu Gln Gly Thr Gln Glu Thr Tyr Thr Leu Ala His Lys Glu Asn
85 90 95
Val Arg Phe Val Ser Glu Ala Trp Gln Gln Val Gln Gln Gln Leu Asp
100 105 110
Gly Gly Pro Ala Gly Glu Gly Gly Pro Arg Pro Val Gln Tyr Val Glu
115 120 125
Arg Thr Pro Asn Pro Arg Leu Gln Asn Phe Val Pro Ile Asp Leu Asp
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<210> 5787
<211> 1683
<212> DNA
<213> Homo sapiens

<400> 5787
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<210> 5788

<211> 417

<212> PRT

<213> Homo sapiens

<400> 5788

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Glu Ile Phe Arg Gln Arg Phe Arg His Leu Arg Tyr Gln Glu Thr Pro			
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Gly Pro Arg Glu Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp			
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Leu Arg Pro Glu Lys His Thr Lys Glu Gln Ile Leu Glu Phe Leu Val			
85	90	95	
Leu Glu Gln Phe Leu Thr Ile Leu Pro Glu Glu Leu Gln Ser Trp Val			
100	105	110	
Arg Gly His His Pro Lys Ser Gly Glu Glu Ala Val Thr Val Leu Glu			
115	120	125	
Asp Leu Glu Lys Gly Leu Glu Pro Glu Pro Gln Val Pro Gly Pro Ala			
130	135	140	
His Gly Pro Ala Gln Glu Glu Pro Trp Glu Lys Lys Glu Ser Leu Gly			
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Ala Ala Gln Glu Ala Leu Ser Ile Gln Leu Gln Pro Lys Glu Thr Gln			
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Pro Phe Pro Lys Ser Glu Gln Val Tyr Leu His Phe Leu Ser Val Val			
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Thr Glu Asp Gly Pro Glu Pro Lys Asp Lys Gly Ser Leu Pro Gln Pro			
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Pro Ile Thr Glu Val Glu Ser Gln Val Phe Ser Glu Lys Leu Ala Thr			
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Asp Thr Ser Thr Phe Glu Ala Thr Ser Glu Gly Thr Leu Glu Leu Gln			
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Gln Arg Asn Pro Lys Ala Glu Arg Leu Arg Trp Ser Pro Ala Gln Glu			
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Glu Ser Phe Arg Gln Met Val Val Ile His Lys Glu Ile Pro Thr Gly			
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Lys Lys Asp His Glu Cys Ser Glu Cys Gly Lys Thr Phe Ile Tyr Asn			
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Ser His Leu Val Val His Gln Arg Val His Ser Gly Glu Lys Pro Tyr			
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Lys Cys Ser Asp Cys Gly Lys Thr Phe Lys Gln Ser Ser Asn Leu Gly			
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Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Asn Glu			
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Cys Gly Lys Ala Phe Arg Trp Gly Ala His Leu Val Gln His Gln Arg			
340	345	350	
Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala			
355	360	365	
Phe Ser Gln Ser Ser Tyr Leu Ser Gln His Arg Arg Ile His Ser Gly			
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Glu Lys Pro Phe Ile Cys Lys Glu Cys Gly Lys Ala Tyr Gly Trp Cys			
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<210> 5789
<211> 1201
<212> DNA
<213> Homo sapiens

<400> 5789
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<210> 5790
<211> 400
<212> PRT
<213> Homo sapiens

<400> 5790

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 35 40 45
 Pro Gln Pro Gly Ala Gly His Asp Glu Gly Pro Gly Ser Gly Trp Ala
 50 55 60
 Ala Lys Gly Thr Val Arg Gly Trp Asn Arg Arg Ala Arg Glu Ser Pro
 65 70 75 80
 Gly His Val Ser Glu Pro Asp Arg Thr Gln Leu Ser Gln Asp Leu Gly
 85 90 95
 Gly Gly Thr Leu Ala Met Asp Thr Leu Pro Asp Asn Arg Thr Arg Val
 100 105 110
 Val Glu Asp Asn His Ser Tyr Tyr Val Ser Arg Leu Tyr Gly Pro Ser
 115 120 125
 Glu Pro His Ser Arg Glu Leu Trp Val Asp Val Ala Glu Ala Asn Arg
 130 135 140
 Ser Gln Val Lys Ile His Thr Ile Leu Ser Asn Thr His Arg Gln Ala
 145 150 155 160
 Ser Arg Val Val Leu Ser Phe Asp Phe Pro Phe Tyr Gly His Pro Leu
 165 170 175
 Arg Gln Ile Thr Ile Ala Thr Gly Gly Phe Ile Phe Met Gly Asp Val
 180 185 190
 Ile His Arg Met Leu Thr Ala Thr Gln Tyr Val Ala Pro Leu Met Ala
 195 200 205
 Asn Phe Asn Pro Gly Tyr Ser Asp Asn Ser Thr Val Val Tyr Phe Asp
 210 215 220
 Asn Gly Thr Val Phe Val Val Gln Trp Asp His Val Tyr Leu Gln Gly
 225 230 235 240
 Trp Glu Asp Lys Gly Ser Phe Thr Phe Gln Ala Ala Leu His His Asp
 245 250 255
 Gly Arg Ile Val Phe Ala Tyr Lys Glu Ile Pro Met Ser Val Pro Glu
 260 265 270
 Ile Ser Ser Ser Gln His Pro Val Lys Thr Gly Leu Ser Asp Ala Phe
 275 280 285
 Met Ile Leu Asn Pro Ser Pro Asp Val Pro Glu Ser Arg Arg Arg Ser
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 Ile Phe Glu Tyr His Arg Ile Glu Leu Asp Pro Ser Lys Val Thr Ser
 305 310 315 320
 Met Ser Ala Val Glu Phe Thr Pro Leu Pro Thr Cys Leu Gln His Arg
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 Ser Cys Asp Ala Cys Met Ser Ser Asp Leu Thr Phe Asn Cys Ser Trp
 340 345 350
 Cys His Val Leu Gln Arg Cys Ser Ser Gly Phe Asp Arg Tyr Arg Gln
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<210> 5791

<211> 3285

<212> DNA

<213> Homo sapiens

<400> 5791

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<210> 5792

<211> 479

<212> PRT

<213> Homo sapiens

<400> 5792

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 35 40 45
 Tyr Pro Leu Asn Asn Phe Ser Val Ala Lys Cys Gln Leu Met Lys Thr
 50 55 60
 Glu Arg Pro Lys Pro Asn Thr Phe Ile Ile Arg Cys Leu Gln Trp Thr
 65 70 75 80
 Thr Val Ile Glu Arg Thr Phe His Val Asp Thr Pro Glu Glu Arg Glu
 85 90 95
 Glu Trp Thr Glu Ala Ile Gln Ala Val Ala Asp Arg Leu Gln Arg Gln
 100 105 110
 Glu Glu Glu Arg Met Asn Cys Ser Pro Thr Ser Gln Ile Asp Asn Ile
 115 120 125
 Gly Glu Glu Glu Met Asp Ala Ser Thr Thr His His Lys Arg Lys Thr
 130 135 140
 Met Asn Asp Phe Asp Tyr Leu Lys Leu Leu Gly Lys Gly Thr Phe Gly
 145 150 155 160
 Lys Val Ile Leu Val Arg Glu Lys Ala Ser Gly Lys Tyr Tyr Ala Met
 165 170 175
 Lys Ile Leu Lys Lys Glu Val Ile Ile Ala Lys Asp Glu Val Ala His
 180 185 190
 Thr Leu Thr Glu Ser Arg Val Leu Lys Asn Thr Arg His Pro Phe Leu
 195 200 205
 Thr Ser Leu Lys Tyr Ser Phe Gln Thr Lys Asp Arg Leu Cys Phe Val
 210 215 220
 Met Glu Tyr Val Asn Gly Gly Glu Leu Phe Phe His Leu Ser Arg Glu
 225 230 235 240
 Arg Val Phe Ser Glu Asp Arg Thr Arg Phe Tyr Gly Ala Glu Ile Val
 245 250 255
 Ser Ala Leu Asp Tyr Leu His Ser Gly Lys Ile Val Tyr Arg Asp Leu
 260 265 270
 Lys Leu Glu Asn Leu Met Leu Asp Lys Asp Gly His Ile Lys Ile Thr
 275 280 285
 Asp Phe Gly Leu Cys Lys Glu Gly Ile Thr Asp Ala Ala Thr Met Lys
 290 295 300
 Thr Ser Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val Leu Glu Asp
 305 310 315 320
 Asn Asp Tyr Gly Arg Ala Val Asp Trp Trp Gly Leu Gly Val Val Met

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Leu	Ser	Ser	Asp	Ala	Lys	Ser	Leu	Leu	Ser	Gly	Leu	Leu	Ile	Lys	Asp				
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Pro	Asn	Lys	Arg	Leu	Gly	Gly	Gly	Pro	Asp	Asp	Ala	Lys	Glu	Ile	Met				
385						390						395			400				
Arg	His	Ser	Phe	Phe	Ser	Gly	Val	Asn	Trp	Gln	Asp	Val	Tyr	Asp	Lys				
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Lys	Leu	Val	Pro	Pro	Phe	Lys	Pro	Gln	Val	Thr	Ser	Glu	Thr	Asp	Thr				
				420						425					430				
Arg	Tyr	Phe	Asp	Glu	Glu	Phe	Thr	Ala	Gln	Thr	Ile	Thr	Ile	Thr	Pro				
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Pro	Glu	Lys	Tyr	Asp	Glu	Asp	Gly	Met	Asp	Cys	Met	Asp	Asn	Glu	Arg				
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<210> 5793

<211> 2767

<212> DNA

<213> Homo sapiens

<400> 5793

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<210> 5794

<211> 209

<212> PRT

<213> Homo sapiens

<400> 5794

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Lys	Val	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Pro	Gln	Asp	Leu	Gln	Ala	Ala
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Leu	Ser	Val	Val	Gly	Gly	Lys	Cys	Thr	Asn	Cys	Leu	Glu	Asp	Glu	Ser
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Ala	Lys	Ala	Lys	Thr	Met	Ile	Val	Ala	Gly	Val	Val	Phe	Leu	Leu	Ala
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Gly	Leu	Met	Val	Ile	Val	Pro	Val	Ser	Trp	Thr	Ala	His	Asn	Ile	Ile
	130					135					140				
Gln	Asp	Phe	Tyr	Asn	Pro	Leu	Val	Ala	Ser	Gly	Gln	Lys	Arg	Glu	Met
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Gly	Ala	Ser	Leu	Tyr	Val	Gly	Trp	Ala	Ala	Ser	Gly	Leu	Leu	Leu	Leu
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Gly	Gly	Gly	Leu	Leu	Cys	Cys	Asn	Cys	Pro	Pro	Arg	Thr	Asp	Lys	Pro
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<210> 5795

<211> 993

<212> DNA

<213> Homo sapiens

<400> 5795

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 Lys Ile Ile His Gln Ala His Lys Ser Lys Thr Asn Glu Leu Val Leu
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 Ser Leu Glu Asp Asp Glu Arg Leu Leu Leu Lys Glu Asp Ser Thr Leu
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<210> 5805
 <211> 1112
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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 5807

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<212> PRT
<213> Homo sapiens

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Asp Leu Gly Leu Leu Leu Phe Val Gly Gln His Ser Leu Met Ala
65 70 75 80
Ala Glu Arg Val Lys Ala Trp Thr Ser Arg Tyr Phe Gly Val Leu Gln
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Arg Ser Leu Tyr Val Ala Cys Thr Ala Leu Ala Leu Gln Leu Val Met
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Arg Tyr Trp Glu Pro Ile Pro Lys Gly Pro Val Leu Trp Glu Ala Arg
115 120 125
Ala Glu Pro Trp Ala Thr Trp Val Pro Leu Leu Cys Phe Val Leu His
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Val Ile Ser Trp Leu Leu Ile Phe Ser Ile Leu Leu Val Phe Asp Tyr
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Ala Glu Leu Met Gly Leu Lys Gln Val Tyr Tyr His Val Leu Gly Leu
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Gly Glu Pro Leu Ala Leu Lys Ser Pro Arg Ala Leu Arg Leu Phe Ser
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His Leu Arg His Pro Val Cys Val Glu Leu Leu Thr Val Leu Trp Val
195 200 205
Val Pro Thr Leu Gly Thr Asp Arg Leu Leu Leu Ala Phe Leu Leu Thr
210 215 220
Leu Tyr Leu Gly Leu Ala His Gly Leu Asp Gln Gln Asp Leu Arg Tyr
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<211> 2009
<212> DNA
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<211> 463

<212> PRT

<213> Homo sapiens

<400> 5812

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165	170	175
Gly Ser Asp Val Gln Asn Lys	Leu Lys Glu Ser Ala Gln	Cys Val Gly
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Asp Glu Phe Leu Asn Cys Lys	Leu Ala Thr Arg Ala Lys	Asp Phe Leu
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225	230	235
Ala Ser Arg Ala Ile Asp Asn	Ala Ala Asp Leu Leu Ile	Phe Gly Lys
245	250	255
Glu Leu Ser Ala Ile Gly Ser	Asp Thr Thr Pro Leu Pro	Ser Trp Ala
260	265	270
Ala Leu Asn Ser Ser Thr Trp	Gly Ser Leu Lys Gln Ala	Leu Lys Gly
275	280	285
Leu Ser Val Glu Phe Ala Leu	Leu Ala Asp Lys Ala Ala	Gln Gln Gly
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Lys Gln Glu Glu Asn Asp Val	Val Glu Lys Leu Asn Leu	Phe Leu Asp
305	310	315
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325	330	335
Leu His Lys His Gln Arg Ala	Leu His Lys Tyr Ser Leu	Met Lys Arg
340	345	350
Gln Met Met Ser Ala Thr Ala	Gln Asn Arg Glu Pro Glu	Ser Val Glu
355	360	365
Gln Leu Glu Ser Arg Ile Val	Glu Gln Glu Asn Ala Ile	Gln Thr Met
370	375	380
Glu Leu Arg Asn Tyr Phe Ser	Leu Tyr Cys Leu His Gln	Glu Thr Gln
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420	425	430
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<211> 2991

<212> DNA

<213> Homo sapiens

<400> 5813

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<211> 149
<212> PRT
<213> Homo sapiens

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Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln
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Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
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Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
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 <213> Homo sapiens

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<210> 5816
 <211> 196
 <212> PRT
 <213> Homo sapiens

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<400> 5816
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20     25     30
Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

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35 40 45
 Thr Arg Tyr His Val Leu Val Asn Leu Gly Leu Pro Ser Leu Phe Ser
 50 55 60
 Phe Gly Leu Val Asp Asp Ala His His Leu Ile Asn Ala Leu Arg Gln
 65 70 75 80
 Gln Ser Ile Thr Leu His Leu Val Asp Val Met Pro Val Leu Ile Thr
 85 90 95
 Leu Ser Ser Leu Gly Ser Ser Phe Leu Leu His Leu Arg Phe Gly Pro
 100 105 110
 Leu Ser Leu Val Ser His Thr Gly Ala Leu Gln Leu Pro Asn Lys Gly
 115 120 125
 Gln His Leu Ser Cys Gly Phe Ile Pro Ala Gly Pro Val Asn Glu Arg
 130 135 140
 Thr Val Ser Leu Glu His Lys Ile Arg Val Arg Leu Val Leu Val Leu
 145 150 155 160
 Gln Thr Thr Gly Gly Tyr Ile Arg His Gly Arg Gly Cys Ser Glu Ala
 165 170 175
 Ser Asp His His Ala Ser Ile Pro Gln Ala Ala Asn Gly Arg Arg Ser
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 Leu Leu Leu Ala
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<210> 5817

<211> 648

<212> DNA

<213> Homo sapiens

<400> 5817

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 360
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 480
 gacacactcg ggaacccccc aaatgttcga aacatgagct ggctgccaaa tggctatgtg
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<210> 5818

<211> 191

<212> PRT

<213> Homo sapiens

<400> 5818

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Met Gly Gln Leu Gln Asn Lys Glu Asn Asn Asn Thr Lys Asp Ser Pro
 1           5           10           15
Ser Arg Gln Cys Ser Trp Asp Lys Ser Glu Ser Pro Gln Arg Ser Ser
          20           25           30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
          35           40           45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
          50           55           60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65           70           75           80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
          85           90           95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
          100          105          110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
          115          120          125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
          130          135          140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145          150          155          160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
          165          170          175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
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<210> 5819

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 5819

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300
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420
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480
gaactggaag aagagattcc tgtggtgatt tgtgctgcag caggaggat gggtgccact
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atggctgcca tcaatagcat ctacagcaac cctgacgcc aacatcttggt ctatgtagt
600

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 720
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 780
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<210> 5820

<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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			20					25					30		
Pro	Lys	Asn	Asp	Ala	Asp	Asp	Glu	Ser	Glu	Thr	Pro	Glu	Glu	Leu	Glu
		35					40				45				
Glu	Glu	Ile	Pro	Val	Val	Ile	Cys	Ala	Ala	Ala	Gly	Arg	Met	Gly	Ala
		50				55					60				
Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	Pro	Asp	Ala	Asn	Ile
65					70					75				80	
Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	Leu	Thr	Arg	Ile	Arg	Lys

				85					90					95					
Trp	Ile	Glu	His	Ser	Lys	Leu	Arg	Glu	Ile	Asn	Phe	Lys	Ile	Val	Glu				
				100				105						110					
Phe	Asn	Pro	Met	Val	Leu	Lys	Gly	Lys	Ile	Arg	Pro	Asp	Ser	Ser	Arg				
				115				120						125					
Pro	Glu	Leu	Leu	Gln	Pro	Leu	Asn	Phe	Val	Arg	Phe	Tyr	Leu	Pro	Leu				
				130				135						140					
Leu	Ile	His	Gln	His	Glu	Lys	Val	Ile	Tyr	Leu	Asp	Asp	Asp	Val	Ile				
				145				150						155					
Val	Gln	Gly	Asp	Ile	Gln	Glu	Leu	Tyr	Asp	Thr	Thr	Leu	Ala	Leu	Gly				
				165				170						175					
His	Ala	Ala	Ala	Phe	Ser	Asp	Asp	Cys	Asp	Leu	Pro	Ser	Ala	Gln	Asp				
				180				185						190					
Ile	Asn	Arg	Leu	Val	Gly	Leu	Gln	Asn	Thr	Tyr	Met	Gly	Tyr	Leu	Asp				
				195				200						205					
Tyr	Arg	Lys	Lys	Ala	Ile	Lys	Asp	Leu	Gly	Ile	Ser	Pro	Ser	Thr	Cys				
				210				215						220					
Ser	Phe	Asn	Pro	Gly	Val	Ile	Val	Ala	Asn	Met	Thr	Glu	Trp	Lys	His				
				225				230						235					
Gln	Arg	Ile	Thr	Lys	Gln	Leu	Glu	Lys	Trp	Met	Gln	Lys	Asn	Val	Glu				
				245				250						255					
Tyr	Val	Lys	Ala	Ser	Leu	Pro	Phe	Phe	Pro	Cys	Leu	Glu	Thr	Lys	Ser				
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Phe	Asn																		

<210> 5821

<211> 3292

<212> DNA

<213> Homo sapiens

<400> 5821

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660

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<210> 5822

<211> 712

<212> PRT

<213> Homo sapiens

<400> 5822

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Ser	Ser	Ser	Ala	Asn	Glu	Asp	Asp	Glu	Val	Phe	Phe	Gly	Pro	Phe	Gly
			20					25					30		
His	Lys	Glu	Arg	Cys	Ile	Ala	Ala	Ser	Leu	Glu	Leu	Asn	Asn	Pro	Val
			35					40					45		
Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
			50					55				60			
Pro	Leu	Ala	Gly	Glu	Lys	Phe	Val	Glu	Val	Tyr	Lys	Glu	Ala	His	Leu
65					70					75				80	
Leu	Ala	Leu	His	Ile	Glu	Ser	Ser	Ser	Arg	Asn	Gln	Ala	Ala	Gln	Ala
			85						90					95	
Ala	Lys	Pro	Glu	Asp	Pro	Arg	Ser	Gln	Gly	Val	Glu	Arg	Phe	Ile	Gln

100 105 110
Glu Ser Lys Leu Lys Ile Asn Leu Phe Glu Lys Glu Lys Glu Met Lys
115 120 125
Lys Ser Pro Thr Ser Leu Lys Arg Glu Thr Tyr Tyr Leu Ser Asp Ser
130 135 140
Pro Leu Leu Gly Pro Pro Val Gly Glu Pro Arg Leu Leu Ala Ser Ser
145 150 155 160
Pro Ala Leu Pro Ser Ser Gly Ala Gln Ala Arg Leu Thr Arg Ala Pro
165 170 175
Gly Pro Pro His Ser Ala His Ala Leu Pro Arg Glu Ser Cys Thr Ala
180 185 190
His Ala Ala Ser Gln Ala Ala Thr Gln Arg Lys Pro Gly Thr Lys Leu
195 200 205
Leu Leu Pro Arg Ala Ala Ser Val Arg Gly Arg Ser Ile Pro Gly Ala
210 215 220
Ala Glu Lys Pro Lys Lys Glu Ile Pro Ala Ser Pro Ser Arg Thr Lys
225 230 235 240
Ile Pro Ala Glu Lys Glu Ser His Arg Asp Val Leu Pro Asp Lys Pro
245 250 255
Ala Pro Gly Ala Val Asn Val Pro Ala Ala Gly Ser His Leu Gly Gln
260 265 270
Gly Lys Arg Ala Ile Pro Val Pro Asn Lys Leu Gly Leu Lys Lys Thr
275 280 285
Leu Leu Lys Ala Pro Gly Ser Thr Ser Asn Leu Ala Arg Lys Ser Ser
290 295 300
Ser Gly Pro Val Trp Ser Gly Ala Ser Ser Ala Cys Thr Ser Pro Ala
305 310 315 320
Val Gly Lys Ala Lys Ser Ser Glu Phe Ala Ser Ile Pro Ala Asn Ser
325 330 335
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340 345 350
Met Leu Arg Pro Ala Leu Pro Ala Gly Pro Val Gly Ala Ser Ser Trp
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Gln Ala Lys Arg Val Asp Val Ser Glu Leu Ala Ala Glu Gln Leu Thr
370 375 380
Ala Pro Pro Ser Ala Ser Pro Thr Gln Pro Gln Thr Pro Glu Gly Gly
385 390 395 400
Gly Gln Trp Leu Asn Ser Ser Cys Ala Trp Ser Glu Ser Ser Gln Leu
405 410 415
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420 425 430
Thr Lys Val Met Pro Thr Pro Thr Asn Gln Phe Lys Ile Pro Lys Phe
435 440 445
Ser Ile Gly Asp Ser Pro Asp Ser Ser Thr Pro Lys Leu Ser Arg Ala
450 455 460
Gln Arg Pro Gln Ser Cys Thr Ser Val Gly Arg Val Thr Val His Ser
465 470 475 480
Thr Pro Val Arg Arg Ser Ser Gly Pro Ala Pro Gln Ser Leu Leu Ser
485 490 495
Ala Trp Arg Val Ser Ala Leu Pro Thr Pro Ala Ser Arg Arg Cys Ser
500 505 510
Gly Leu Pro Pro Met Thr Pro Lys Thr Met Pro Arg Ala Val Gly Ser
515 520 525
Pro Leu Cys Val Pro Ala Arg Arg Arg Ser Ser Glu Pro Arg Lys Asn

530	535	540
Ser Ala Met Arg Thr Glu Pro Thr Arg Glu Ser Asn Arg Lys Thr Asp		
545	550	555
Ser Arg Leu Val Asp Val Ser Pro Asp Arg Gly Ser Pro Pro Ser Arg		560
	565	570
Val Pro Gln Ala Leu Asn Phe Ser Pro Glu Glu Ser Asp Ser Thr Phe		575
	580	585
Ser Lys Ser Thr Ala Thr Glu Val Ala Arg Glu Glu Ala Lys Pro Gly		590
	595	600
Gly Asp Ala Ala Pro Ser Glu Ala Leu Leu Val Asp Ile Lys Leu Glu		605
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Pro Leu Ala Val Thr Pro Asp Ala Ala Ser Gln Pro Leu Ile Asp Leu		620
625	630	635
Pro Leu Ile Asp Phe Cys Asp Thr Pro Glu Ala His Val Ala Val Gly		640
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Ser Glu Ser Arg Pro Leu Ile Asp Leu Met Thr Asn Thr Pro Asp Met		655
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Asn Lys Asn Val Ala Lys Pro Ser Pro Val Val Gly Gln Leu Ile Asp		670
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<210> 5823

<211> 2585

<212> DNA

<213> Homo sapiens

<400> 5823

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720

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